REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G–　　–	
G–　　–	
G–　　–	

9301946, 750038

アイワ株式会社
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Printed in Singapore

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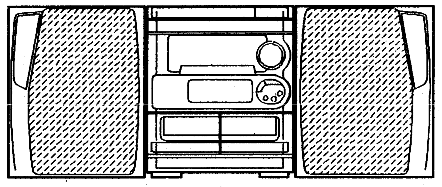
aiwa

aiwa
SERVICE

NSX-S30
NSX-S32
NSX-S33
NSX-S35
NSX-S36



COMPACT DISC STEREO CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 6ZM-3 PR1NM<30EZ,35EZ,K,V>
  6ZM-3 PR2NM<32HR>, 2ZM-3MK2 PR4NM<33EZ,36HR>
- BASIC CD MECHANISM : 4ZG–1 Z1DNM

- TYPE : HR,EZ,K,V

SYSTEM	SPEAKER	CD – CASSEIVER
NSX–S30 (TYPE : EZ,K,V)	SX – NS30	CX–NS30
NSX–S32 (TYPE : HR)		CX–NS32
NSX–S33 (TYPE : EZ)		CX–NS33
NSX–S35 (TYPE : EZ)	SX – NS30 SX – R270	CX–NS35
NSX–S36 (TYPE : HR)	SX – FNS36	CX–NS36

If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-974-187-50T.

SERVICE MANUAL

S/M Code No. 09–976–181–5FE

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ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

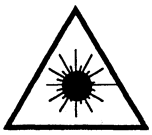
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NF7-901-010		IB,H(ECA)M-36<36HR>
1	87-NF7-913-010		IB,H(ECA)M-32<32HR>
1	87-NF7-922-119		IB,E(EGFSI)M<30EZ>
1	87-NF7-914-010		IB,E(EGFSI)E-33<33EZ>
1	87-NF7-906-010		IB,E(EGFSI)E<35EZ>
1	87-NF7-905-010		IB,K(E)E<30K>
1	87-NF7-907-010		IB,V(ERHPCH)M<30V>
2	87-006-225-010		ANT,LOOP ANT NC2<30EZ,33EZ,35EZ,30K,30V>
2	87-043-095-010		ANT,WIRE<32HR,36HR>
2	87-A90-054-016		ANT,LOOP AM-CON C<32HR,36HR>
3	87-043-106-010		ANT,FM-1007AWG<30EZ,33EZ,35EZ,30K>
3	87-A90-064-010		FEEDER-ANT,FM (SHS)<EXCEPT 30EZ>
⚠ 4	87-A90-312-016		PLUG,CONVERSION WTN-1157R1<32HR,36HR>
5	87-NF6-635-010		RC UNIT,RC-7AS06

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

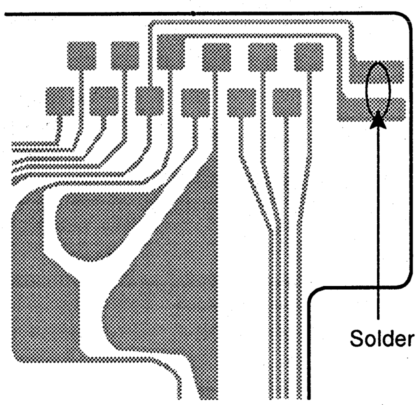
Precaution to replace Optical block

(KSS – 213B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in figure below.

PICK-UP Assy P.C.B



SPECIFICATIONS

<FM Tuner section>

Tuning range	EXCEPT 30V : 87.5 MHz to 108 MHz 30V : FM1 (OIRT) : 65 MHz to 74 MHz (10kHz step) FM2 (CCIR) : 87.5 MHz to 108 MHz (50kHz step)
Usable sensitivity (IHF)	30EZ, 33EZ, 35EZ, 32HR, 36HR : 13.2 dBf 30K : 16.8 dBf 30V : FM1 : 15.3 dBf, FM2 : 12.8 dBf
Antenna terminals	75 ohms (unbalanced)

<MW Tuner section>

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<LW Tuner section>[30EZ,33EZ,35EZ,30K,30V]

Tuning range	144 kHz to 290 kHz (9 kHz step)
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

<SW Tuner section>[32/36HR]

Tuning range	5.900 MHz to 17.900 MHz
Antenna	Wire antenna

<Amplifier section>

Power output *	30EZ, 33EZ, 35EZ, 30K, 30V : Rated : 30 W + 30 W (6 ohms, THD 1 %, 1kHz / DIN 45500) Reference : 41 W + 41 W (6 ohms, THD 10 %, 1kHz / DIN 45324) DIN MUSIC POWER 90 W + 90 W 32HR : Rated : 40 W + 40 W (6 ohms, THD 1 %, 1kHz) Reference : 50 W + 50 W (6 ohms, THD 10 %, 1kHz) 36HR : Rated : 68 W + 68 W (6 ohms, THD 1 %, 1kHz) Reference : 85 W + 85 W (6 ohms, THD 10 %, 1kHz)

* (without connecting to the SURROUND SPEAKERS)

Total harmonic distortion	32HR, 30EZ, 33EZ, 35EZ, 30K, 30V : 0.05 % (15 W, 1 kHz, 6 ohms DIN AUDIO) 36HR : 0.05 % (43 W, 1 kHz, 6 ohms DIN AUDIO)
Inputs	30EZ, 33EZ, 35EZ, 30K, 30V : VIDEO/AUX : 150 mV (adjustable) MIC : 1.7 mV (10 kohms) 32/36HR : VIDEO/AUX : 150 mV (adjustable) MIC1, MIC2 : 1mV (10 kohms)
Outputs	30EZ, 33EZ, 35EZ, 30K, 30V : SUPER WOOFER : 1.3 V 32HR : SUPER WOOFER : 1.7 V 36HR : SUPER WOOFER : 2.3 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS : accept speakers of 16 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz –15000 Hz
Recording system	AC bias
Heads	Deck 1 : Playback head x1 Deck 1 : Recording/playback/ erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX–NS30>

Cabinet type	3 way, bass reflex (magnetic shielded type)
Speakers	Woofer : 140 mm cone type Tweeter : 60 mm cone type Super tweeter : 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	240 x 304 x 250 mm
Weight	2.8 kg

<Speaker system SX–FNS36>

Cabinet type	2 way, bass reflex with surround speaker (magnetic shielded type)
Speakers	Woofer : 140 mm cone type Tweeter : 60 mm cone type Surround speaker : 60 mm cone type
Impedance	Front speaker : 6 ohms Surround speaker : 16 ohms
Dimensions (W x H x D)	240 x 304 x 253 mm
Weight	3.2 kg

<General>

Power requirements	32/36HR : 120 V/ 220 – 230 V/240 V AC, switchable 50/60 Hz 30EZ, 33EZ, 35EZ, 30K, 30V : 230 V AC, 50Hz
Power consumption	32/36HR : 115 W 30EZ, 33EZ, 35EZ, 30K, 30V : 110 W
Dimensions of main unit (W x H x D)	260 x 309 x 346 mm
Weight of main unit	30EZ, 33EZ, 35EZ, 30K, 30V : 5.9 kg 32HR : 6.5 kg 36HR : 6.7 kg

- Design and specifications are subject to change without notice.

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-NF4-642-010		IC,LC866548V-5E54
	87-070-083-010		IC,GP1U281X
	87-A20-501-040		C-IC,BA7762FS
	87-A20-083-010		IC,BA3835S
	87-A20-450-040		C-IC,BH3864F
	87-A20-613-040		C-IC,BU9262FS<HR>
	87-A20-456-040		C-IC,BH3810FS
	87-017-888-080		C-IC,NJM4558MD
	86-NFZ-655-010		IC,LC72131D(Z)
	87-A20-438-010		IC,LA1837
	87-020-454-010		IC,DN6851
	87-A20-440-040		C-IC,BU1920FS<30EZ,35EZ>
TRANSISTOR			
	87-026-263-080		C-TR,RN1410
	89-213-702-010		TR,2SB1370E
	87-A30-076-080		C-TR,2SC3052F
	87-026-610-080		TR,KTC3198GR
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-085-070		C-TR,CSA1362GR
	87-A30-083-080		TR,CSD1489B
	87-A30-075-080		C-TR,2SA1235F
	87-A30-084-080		TR,CSB1058B
	87-A30-071-080		C-TR,RT1N 144C
	87-026-609-080		TR,KTA1266GR
	87-A30-086-070		C-TR,CSD1306E
	87-A30-106-070		C-TR,CMBT5551
	87-A30-111-080		TR,C2N5401
	87-A30-109-010		TR,2SD2495
	87-A30-097-010		TR,FN1016
	87-A30-108-010		TR,2SB1626
	87-A30-098-010		TR,FP1016
	87-A30-089-010		FET,2SK2723
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-087-080		C-FET,2SK2158
	87-A30-074-080		C-TR,RT1P141C
	89-327-143-080		C-TR,2SC2714 (O)
	87-026-463-080		TR,2SA933S
DIODE			
	87-A40-270-080		C-DIODE,MC2838
	87-A40-116-060		DIODE,RS403L-B-D-51
	87-A40-115-060		DIODE,RS603M
	87-017-437-080		DIODE,1N4148M
	87-A40-246-080		DIODE,1N4148T-72
	87-A40-269-080		C-DIODE,MC2836
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-344-080		ZENER,MTZJ6.2C
	87-A40-341-080		ZENER,MTZJ36A
	87-A40-345-080		ZENER,MTZJ10C
	87-A40-004-089		ZENER,MTZJ16 A
	87-A40-184-090		DIODE,RK34 (F)<HR>
	87-070-136-080		ZENER,MTZJ5.1B
	87-017-481-080		ZENER,UZ-5.6BSB
	87-A40-003-080		ZENER,MTZJ4.3A
	87-A40-234-080		ZENER,MTZJ5.6A
MAIN C.B			
C101	87-016-055-090		CAP,E 3300-42<EZ,K,V>
C101	87-016-520-090		CAP,E 3300-65 M SMG<36HR>
C101	87-010-917-090		CAP,E 3300-50 M SMG<32HR>
C102	87-016-055-090		CAP,E 3300-42<EZ,K,V>
C102	87-016-520-090		CAP,E 3300-65 M SMG<36HR>
C102	87-010-917-090		CAP,E 3300-50 M SMG<32HR>
C103	87-A10-520-090		CAP,E 3300-35 M SMG<32HR,EZ,K,V>
C103	87-016-658-090		CAP,E 4700-35 M SMG<36HR>
C104	87-016-658-090		CAP,E 4700-35 M SMG<36HR>
C105	87-012-368-080		C-CAP,S 0.1-50 Z F
C106	87-012-368-080		C-CAP,S 0.1-50 Z F
C107	87-012-368-080		C-CAP,S 0.1-50 Z F
C108	87-012-368-080		C-CAP,S 0.1-50 Z F
C109	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C110	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C111	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C112	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C113	87-010-247-080		CAP,E 100-50 M SME<32HR>
C113	87-A10-417-080		CAP,E 47-63 SME<36HR>
C113	87-010-408-080		CAP,E 47-50 SME<EZ,K,V>
C116	87-010-247-080		CAP,E 100-50 M SME<32HR>
C116	87-A10-417-080		CAP,E 47-63 SME<36HR>
C116	87-010-408-080		CAP,E 47-50 SME<EZ,K,V>
C117	87-010-430-080		CAP,E 100-63
C118	87-010-263-080		CAP,E 100-10 SME
C119	87-010-260-080		CAP,E 47-25 SME
C120	87-010-403-080		CAP,E 3.3-50 M SME
C121	87-012-140-080		C-CAP,S 470P-50 J CH
C123	87-010-384-080		CAP,E 100-25M SME
C124	87-010-112-080		CAP,E 100-16 M SME
C125	87-010-235-080		CAP,E 470-16 SME
C126	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C127	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C128	87-010-394-080		CAP,E 220-35 M SME<32HR,EZ,K,V>
C129	87-010-393-080		CAP,E 100-35 M SME<36HR>
C201	87-010-400-080		CAP,E 0.47-50 M SME
C202	87-010-400-080		CAP,E 0.47-50 M SME
C205	87-010-183-080		C-CAP,S 2700P-50 K B<36HR>
C205	87-010-184-080		C-CAP,S 3300P-50 K B<32HR>
C205	87-010-185-080		C-CAP,S 3900P-50 K B<EZ,K,V>
C206	87-010-183-080		C-CAP,S 2700P-50 K B<36HR>
C206	87-010-184-080		C-CAP,S 3300P-50 K B<32HR>
C206	87-010-185-080		C-CAP,S 3900P-50 K B<EZ,K,V>
C207	87-010-404-080		CAP,E 4.7-50 M SME
C208	87-010-404-080		CAP,E 4.7-50 M SME
C209	87-010-404-080		CAP,E 4.7-50 M SME
C210	87-010-404-080		CAP,E 4.7-50 M SME
C211	87-010-186-080		C-CAP,S 4700P-50 K B
C212	87-010-186-080		C-CAP,S 4700P-50 K B
C213	87-010-260-080		CAP,E 47-25 SME
C214	87-010-260-080		CAP,E 47-25 SME
C215	87-012-368-080		C-CAP,S 0.1-50 Z F<HR>
C215	87-010-196-080		C-CAP,S 0.1-25 Z F<EZ,K,V>
C219	87-012-368-080		C-CAP,S 0.1-50 Z F
C220	87-012-368-080		C-CAP,S 0.1-50 Z F
C221	87-012-368-080		C-CAP,S 0.1-50 Z F
C222	87-012-368-080		C-CAP,S 0.1-50 Z F
C223	87-010-194-080		C-CAP,S 0.047-25 Z F<HR>
C225	87-A10-516-080		C-CAP,S 100P-200V
C226	87-A10-516-080		C-CAP,S 100P-200 V
C227	87-010-197-080		C-CAP,S 0.01-25 K B<EZ,K,V>
C228	87-010-178-080		C-CAP,S 1000P-50 K B<EZ,K,V>
C229	87-016-461-080		C-CAP,S 0.47-16 FZ<EZ,K,V>
C230	87-016-461-080		C-CAP,S 0.47-16 FZ<EZ,K,V>
C231	87-010-176-080		C-CAP,S 680P-50 J SL<EZ,K,V>
C232	87-010-176-080		C-CAP,S 680P-50 J SL<EZ,K,V>
C233	87-010-318-080		C-CAP,S 47P-50 J CH<EZ,K,V>
C234	87-010-318-080		C-CAP,S 47P-50 J CH<EZ,K,V>
C235	87-010-191-080		C-CAP,S 0.015-50 FZ<EZ,K,V>
C236	87-010-191-080		C-CAP,S 0.015-50 FZ<EZ,K,V>
C237	87-010-197-080		C-CAP,S 0.01-25 K B<EZ,K,V>
C238	87-010-197-080		C-CAP,S 0.01-25 K B<EZ,K,V>
C239	87-010-318-080		C-CAP,S 47P-50 J CH<EZ,K,V>
C240	87-010-318-080		C-CAP,S 47P-50 J CH<EZ,K,V>
C242	87-010-406-080		CAP,E 22-50 M SME
C243	87-010-197-080		C-CAP,S 0.01-25 K B
C244	87-010-406-080		CAP,E 22-50 M SME
C301	87-010-318-080		C-CAP,S 47P-50 J CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C302	87-010-318-080		C-CAP,S 47P-50 J CH
C303	87-012-145-080		C-CAP,S270P-50CH<32HR,30/35EZ,K,V>
C303	87-012-157-080		C-CAP,S 330P-50 J CH<36HR,33EZ>
C304	87-012-145-080		C-CAP,S 270P-50CH<32HR,30/35EZ,K,V>
C304	87-012-157-080		C-CAP,S 330P-50 J CH<36HR,33EZ>
C305	87-012-145-080		C-CAP,S 270P-50 J CH
C306	87-012-145-080		C-CAP,S 270P-50 J CH
C307	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C309	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C310	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C311	87-010-198-080		C-CAP,S 0.022-25 K B
C312	87-010-198-080		C-CAP,S 0.022-25 K B
C313	87-010-178-080		C-CAP,S 1000P-50 K B<36HR,33EZ>
C313	87-010-182-080		C-CAP,S2200P-50KB<32HR,30/35EZ,K,V>
C314	87-010-178-080		C-CAP,S 1000P-50 K B<36HR,33EZ>
C314	87-010-182-080		C-CAP,S2200P-50KB<32HR,30/35EZ,K,V>
C315	87-010-178-080		C-CAP,S 1000P-50 K B<36HR,33EZ>
C315	87-010-182-080		C-CAP,S2200P-50KB<32HR,30/35EZ,K,V>
C316	87-010-178-080		C-CAP,S 1000P-50 K B<36HR,33EZ>
C316	87-010-182-080		C-CAP,S2200P-50KB<32HR,30/35EZ,K,V>
C321	87-016-492-080		C-CAP,S 0.33-16 Z F
C322	87-016-492-080		C-CAP,S 0.33-16 Z F
C324	87-010-260-080		CAP,E 47-25 SME
C325	87-010-370-080		CAP,E 330-6.3 M SME
C327	87-010-404-080		CAP,E 4.7-50 M SME
C328	87-010-404-080		CAP,E 4.7-50 M SME
C332	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C335	87-010-401-080		CAP,E 1-50 M SME
C336	87-010-401-080		CAP,E 1-50 M SME
C337	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C339	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C340	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C351	87-012-140-080		C-CAP,S 470P-50 J CH
C352	87-012-140-080		C-CAP,S 470P-50 J CH
C354	87-010-175-080		C-CAP,S 560P-50 J SL
C355	87-010-178-080		C-CAP,S 1000P-50 K B
C356	87-010-260-080		CAP,E 47-25 SME
C357	87-010-197-080		C-CAP,S 0.01-25 K B
C358	87-010-183-080		C-CAP,S 2700P-50 K B
C359	87-010-183-080		C-CAP,S 2700P-50 K B
C360	87-010-183-080		C-CAP,S 2700P-50 K B
C370	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C373	87-010-993-080		C-CAP,S 0.056-25 K B
C374	87-010-993-080		C-CAP,S 0.056-25 K B
C378	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C379	87-010-382-080		CAP,E 22-25 M SME
C380	87-010-382-080		CAP,E 22-25 M SME
C381	87-010-197-080		C-CAP,S 0.01-25 K B<36HR,33EZ>
C382	87-010-312-080		C-CAP,S 15P-50 J CH<36HR,33EZ>
C383	87-010-197-080		C-CAP,S 0.01-25 K B<36HR,33EZ>
C384	87-010-402-080		CAP,E 2.2-50 M SME<36HR,33EZ>
C386	87-010-196-080		C-CAP,S 0.1-25 Z F<36HR,33EZ>
C387	87-012-145-080		C-CAP,S 270P-50 J CH<36HR,33EZ>
C388	87-010-154-080		C-CAP,S 10P-50 D CH
C420	87-010-197-080		C-CAP,S 0.01-25 K B<EZ,K,V>
C421	87-010-402-080		CAP,E 2.2-50 SME
C422	87-010-402-080		CAP,E 2.2-50 SME
C516	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C605	87-010-180-080		C-CAP,S 1500P-50 K B
C606	87-010-180-080		C-CAP,S 1500P-50 K B
C609	87-010-322-080		C-CAP,S 100P-50 J CH<EZ,K,V>
C610	87-010-322-080		C-CAP,S 100P-50 J CH<EZ,K,V>
C611	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C615	87-010-183-080		C-CAP,S 2700P-50 K B
C619	87-010-263-080		CAP,E 100-10 SME
C620	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C621	87-010-263-080		CAP,E 100-10 SME
C622	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C623	87-010-194-080		C-CAP,S 0.047-25 Z F
C627	87-010-316-080		C-CAP,S 33P-50 J CH<EZ,K,V>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C628	87-010-316-080		C-CAP,S 33P-50 J CH<EZ,K,V>
C629	87-012-368-010		C-CAP,0.1-50 FZ
C630	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C631	87-015-785-080		C-CAP,0.1-25 Z F
C632	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C633	87-010-197-080		C-CAP,S 0.01-25 K B<EZ,K,V>
C636	87-010-322-080		C-CAP,S 100P-50 J CH<EZ,K,V>
C637	87-010-322-080		C-CAP,S 100P-50 J CH<EZ,K,V>
C646	87-010-322-080		C-CAP,S 100P-50 J CH
C647	87-010-322-080		C-CAP,S 100P-50 J CH
C701	87-010-381-080		CAP,E 330-16 SME
C702	87-010-404-080		CAP,E 4.7-50 M SME
C703	87-010-197-080		C-CAP,S 0.01-25 K B
C704	87-010-197-080		C-CAP,S 0.01-25 K B
C711	87-010-263-080		CAP,E 100-10 SME
C712	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C713	87-010-197-080		C-CAP,S 0.01-25 K B
C714	87-010-197-080		C-CAP,S 0.01-25 K B
C715	87-010-322-080		C-CAP,S 100P-50 CH<EZ,K,V>
C721	87-010-312-080		C-CAP,S 15P-50 J CH
C722	87-010-312-080		C-CAP,S 15P-50 J CH
C723	87-010-178-080		C-CAP,S 1000P-50 K B
C725	87-010-178-080		C-CAP,S 1000P-50 K B
C727	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C728	87-010-248-080		CAP,E 220-10 SME
C755	87-010-197-080		C-CAP,S 0.01-25 K B
C756	87-010-197-080		C-CAP,S 0.01-25 K B
C757	87-010-318-080		C-CAP,S 47P-50 J CH
C758	87-010-149-080		C-CAP,S 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C762	87-010-197-080		C-CAP,S 0.01-25 K B
C763	87-010-194-080		C-CAP,S 0.047-25 Z F
C765	87-010-197-080		C-CAP,S 0.01-25 K B
C766	87-010-197-080		C-CAP,S 0.01-25 K B
C767	87-010-405-080		CAP,E 10-50 M SME
C768	87-010-197-080		C-CAP,S 0.01-25 K B
C769	87-010-408-080		CAP,E 47-50 SME
C770	87-015-821-080		C-CAP, 0.047-50 Z F GR
C771	87-010-407-080		CAP,E 33-50 SME
C772	87-010-194-080		C-CAP,S 0.047-25 Z F
C773	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C774	87-010-263-080		CAP,E 100-10 SME
C775	87-010-404-080		CAP,E 4.7-50 M SME
C776	87-010-197-080		C-CAP,S 0.01-25 K B<EXCEPT HR>
C777	87-010-400-080		CAP,E 0.47-50 M SME
C778	87-010-401-080		CAP,E 1-50 M SME
C779	87-010-401-080		CAP,E 1-50 M SME
C780	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C781	87-010-405-080		CAP,E 10-50 M SME
C782	87-010-405-080		CAP,E 10-50 M SME
C783	87-015-819-080		C-CAP,0.01-50 K B
C784	87-010-197-080		C-CAP,S 0.01-25 K B
C785	87-010-400-080		CAP,E 0.47-50 M SME
C786	87-010-400-080		CAP,E 0.47-50 M SME
C787	87-010-184-080		C-CAP,S 3300P-50 K B
C788	87-010-184-080		C-CAP,S 3300P-50 K B
C789	87-010-179-080		C-CAP,S 1200P-50 K B
C790	87-010-179-080		C-CAP,S 1200P-50 K B
C791	87-010-405-080		CAP,E 10-50 M SME
C793	87-010-178-080		C-CAP,S 1000P-50KB<EXCEPT 30/35EZ>
C793	87-012-156-080		C-CAP,S 220P-50 CH<30/35EZ>
C794	87-010-406-080		CAP,E 22-50 M SME
C795	87-010-596-080		C-CAP,S 0.047-25 R K
C796	87-010-403-080		CAP,E 3.3-50 M SME
C797	87-010-180-080		C-CAP,S 1500P-50 K B
C798	87-010-180-080		C-CAP,S 1500P-50 K B
C799	87-010-194-080		C-CAP,S 0.047-25 Z F
C812	87-010-197-080		C-CAP,S 0.01-25 K B
C814	87-010-197-080		C-CAP,S 0.01-25 K B
C820	87-010-408-080		CAP,E 47-50 SME

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C821	87-010-197-080		C-CAP,S 0.01-25 K B
C822	87-010-197-080		C-CAP,S 0.01-25 K B
C823	87-010-197-080		C-CAP,S 0.01-25 K B
C828	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C829	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C859	87-010-197-080		C-CAP,S 0.01-25 K B<30EZ,35EZ>
C861	87-012-156-080		C-CAP,S 220P-50 CH<30EZ,35EZ>
C862	87-012-156-080		C-CAP,S 220P-50 CH<30EZ,35EZ>
C863	87-012-140-080		C-CAP,S 470P-50 CH<30EZ,35EZ>
C864	87-010-405-080		CAP,E 10-50 M SME<30EZ,35EZ>
C865	87-010-196-080		C-CAP,S 0.1-25 Z F <30EZ,35EZ>
C866	87-010-405-080		CAP,10-50 M SME<30EZ,35EZ>
C867	87-010-197-080		C-C,CAP,S 0.01-25 K B<30EZ,35EZ>
C868	87-010-316-080		C-CAP,S 33P-50 CH<30EZ,35EZ>
C869	87-010-314-080		C-CAP,S 22P-50 CH<30EZ,35EZ>
C940	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C941	87-010-314-080		C-CAP,S 22P-50 CH<HR>
C942	87-010-151-080		C-CAP,S 7P-50 CH<EZ,K,V>
C943	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C944	87-014-051-080		CAP,PP 560P-100T<HR>
C945	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C947	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C950	87-014-073-080		CAP,PP 4700P-100J<HR>
C952	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C953	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C954	87-010-400-080		CAP,E 0.47-50 SME<HR>
C956	87-010-263-080		CAP,E 100-10 SME<HR>
C957	87-010-311-080		C-CAP,S 12P-50 CH<EZ,K,V>
C958	87-010-197-080		C-CAP,S 0.01-25 K B<EZ,K,V>
C959	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C960	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C961	87-010-152-080		C-CAP,S 8P-50 D CH<EXCEPT HR>
C962	87-010-401-080		CAP,E 1-50 M SME
CF801	87-008-261-010		FLTR,CFSFE10.7MA5<HR>
CF801	87-008-423-010		FLTR,IF SFE10.7MS3G-A<EZ,K,V>
CF802	87-008-261-010		FLTR,CFSFE10.7MA5<HR>
CF802	82-785-747-010		CF,MS2 GHY R<EZ,K,V>
FB301	87-008-372-080		FLTR,EMIB01<EZ,K,V>
FFE801	A8-7ZA-290-030		7ZA-2 FEUNM<HR>
FFE801	A8-6ZA-193-030		6ZA-1 FEVNM<V>
FFE801	A8-6ZA-195-030		6ZA-1 YFEENM<EZ,K>
J252	87-A60-024-010		JACK,DIA6.3 BLK ST W/SW KM
J253	87-099-474-010		JACK,PIN 3P BLK W/SW
J254	87-A60-238-010		TERMINAL,SP 4P (MSC)
J601	87-A60-425-010		JACK,PIN 2P YKC21
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V<HR,V>
J801	87-A60-427-010		TERMINAL,ANT PAL 2P YKD31<EZ,K>
J940	81-754-629-010		CONNECTOR, XH 2P<HR>
L201	87-003-383-010		COIL,1UH K
L202	87-003-383-010		COIL,1UH K
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85KHZ BIAS
L601	87-003-231-010		C-COIL,1UH K
L770	87-005-849-080		COIL,10UH K CECS
L771	87-A50-165-010		COIL,FM DET-N(TOK)
L772	87-A90-245-010		FLTR,CFAZH-450 (TOK)
L832	87-005-847-080		COIL,2.2UH K CECS
L850	87-005-847-010		COIL,2.2UH<EZ>
L941	87-A50-022-080		COIL,ANT SW C01<HR>
L941	87-A50-020-080		COIL,ANT LW (C01)252KHZ<EZ,K,V>
L942	87-A50-173-080		COIL,OSC SW-N C01<HR>
L942	87-A50-019-080		COIL,OSC LW (C01)856KHZ<EZ,K,V>
L943	87-005-372-080		COIL,1MH K LA103<HR>
L944	87-A50-159-080		COIL,10MH<HR>
L981	86-NF4-666-010		COIL,AM PACK3 (TOK)<HR>
L981	86-NF4-668-010		COIL,AM PACK2 (TOK)<EZ,K,V>
⚠PR201	87-A90-195-010		PROTECTOR,7A 125V 491<36HR>
⚠PR202	87-A90-195-010		PROTECTOR,7A 125V 491<36HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠PR230	87-A90-195-010		PROTECTOR,7A 125V 491<32HR,EZ,K,V>
⚠PR235	87-A90-195-010		PROTECTOR,7A 125V 491<32HR,EZ,K,V>
R123	87-022-200-080		RES,M/F 0.56-1W J
R229	87-A00-257-080		RES,M/F 0.15-1W J
R230	87-A00-257-080		RES,M/F 0.15-1W J
RY101	87-045-389-010		RELAY,12V OSA-SS-212DM5
RY201	87-045-382-010		RELAY,12V OUAZ-SH-112L<HR>
SFR301	87-024-438-080		SFR,220K H RH063MC
SFR302	87-024-438-080		SFR,220K H RH063MC
SFR303	87-024-438-080		SFR,220K H RH063MC
SFR304	87-024-438-080		SFR,220K H RH063MC
SFR351	87-024-436-080		SFR,47K H RH063MC
SFR352	87-024-436-080		SFR,47K H RH063MC
TC941	87-011-220-080		TRIMMER,CER 20P 6.15X5.9<HR>
TC942	87-011-221-080		TRIMMER,CER 30P 6.15X5.9
TH201	87-A90-221-080		C-THMS,100K
TH202	87-A90-221-080		C-THMS,100K
W1	85-NF5-628-010		F-CABLE,7P-2.5
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X771	87-030-354-010		VIB,CER 450KHZ BFU<HR>
X850	87-A70-091-010		VIB,XTAL 4.332MHZ<EZ>

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-010-198-080		C-CAP,S 0.022-25 K B
C102	87-010-198-080		C-CAP,S 0.022-25 K B
C103	87-010-197-080		C-CAP,S 0.01-25 K B
C104	87-010-312-080		C-CAP,S 15P-50 J CH
C105	87-010-316-080		C-CAP,S 33P-50 J CH
C106	87-010-320-080		C-CAP,S 68P-50 J CH
C107	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C108	87-010-498-040		CAP,E 10-16M 5L SRE<HR>
C109	87-010-494-040		CAP,E 1-50 5L SRE
C110	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C111	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C112	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C113	87-A10-189-040		CAP,E 220-10 M
C114	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C115	87-010-178-080		C-CAP,S 1000P-50 K B
C116	87-010-401-040		CAP,E 1-50 M SME
C117	87-010-550-040		CAP,E 100-6.3 5L SRE
C118	87-010-194-080		C-CAP,S 0.047-25 Z F
C119	87-010-408-040		CAP,E 47-50 M SME
C120	87-010-404-040		CAP,E 4.7-50 SME
C121	87-010-404-040		CAP,E 4.7-50 SME
C122	87-010-194-080		C-CAP,S 0.047-25 Z F
C123	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C124	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C127	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C128	87-010-178-080		C-CAP,S 1000P-50 K B
C351	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C352	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C353	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C354	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C355	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C356	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C357	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C403	87-010-596-080		C-CAP,S 0.047-16 K R
C404	87-010-596-080		C-CAP,S 0.047-16 K R
C405	87-010-401-040		CAP,E 1-50 M SME
C406	87-010-401-040		CAP,E 1-50 M SME
C407	87-010-184-080		C-CAP,S 3300P-50 K B
C408	87-010-184-080		C-CAP,S 3300P-50 K B
C409	87-010-593-080		C-CAP,S 0.027-16 K R
C410	87-010-593-080		C-CAP,S 0.027-16 K R
C411	87-016-463-080		C-CAP,0.33-16 K B
C412	87-016-463-080		C-CAP,0.33-16 K B
C413	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C414	87-010-374-040		CAP,E 47-10 SME

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C415	87-010-374-040		CAP,E 47-10 SME
C416	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C417	87-016-081-080		C-CAP,S 0.1-16 K R
C418	87-010-405-040		CAP,E 10-50 M SME
C501	87-010-319-080		C-CAP,S 56P-50 J CH<HR>
C502	87-010-319-080		C-CAP,S 56P-50 J CH<HR>
C503	87-012-393-080		C-CAP,S 0.22-16 K W5R CM/CB<HR>
C504	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C505	87-010-180-080		C-CAP,S 1500P-50 K B<HR>
C506	87-010-213-080		C-CAP,S 0.015-25K B<HR>
C507	87-010-213-080		C-CAP,S 0.015-25K B<HR>
C508	87-010-197-080		C-CAP,S 0.01-25 K B<HR>
C509	87-010-181-080		C-CAP,S 1800P-50 K B<HR>
C510	87-010-196-080		C-CAP,S 0.1-25 Z F C2012<HR>
C512	87-010-374-040		CAP,E 47-10 SME<HR>
C513	87-010-494-040		CAP,E 1-50 5L SRE<HR>
C514	87-010-494-040		CAP,E 1-50 5L SRE<HR>
C515	87-010-183-080		C-CAP,S 2700P-50 K B<HR>
C516	87-010-183-080		C-CAP,S 2700P-50 K B<HR>
C518	87-010-196-080		C-CAP,S 0.1-25 Z F C2012<HR>
C519	87-015-677-040		CAP,E 100-6.3 M 7L SRA<HR>
C521	87-018-209-080		CAP,TC-U 0.1-50 FZ<HR>
C523	87-012-393-080		C-CAP,S 0.22-16 K W5R CM/CB<HR>
C601	87-010-560-040		CAP,E 10-50 M 5L MA
C602	87-010-186-080		C-CAP,S 4700P-50 K B
C603	87-010-498-040		CAP,E 10-16 M 5L SRE
C604	87-010-499-040		CAP,E 22-6.3 M 5L SRE
C605	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C606	87-010-322-080		C-CAP,S 100P-50 J CH<EZ,K,V>
C607	87-010-321-080		C-CAP,S 82P-50 J CH
C608	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C609	87-010-491-040		CAP,E 0.22-50 5L SRE
C610	87-010-322-080		C-CAP,S 100P-50 J CH<EZ,K,V>
C611	87-010-177-080		C-CAP,S 820P-50 J SL
C612	87-010-176-080		C-CAP,S 680P-50 J SL<EZ,K,V>
C614	87-010-248-040		CAP,E 220-10 M SME
FB601	87-008-372-080		FLTR,EMIBL01 RN1
FL101	87-NF7-603-010		FL,BJ532GK
J601	82-NF7-630-010		JACK,3.5MO
J602	82-NF7-630-010		JACK,3.5MO<HR>
L501	87-005-448-080		COIL,220UH K FLR50<HR>
S301	87-A90-164-080		SW,TACT SKQNAB(N)
S302	87-A90-164-080		SW,TACT SKQNAB(N)
S304	87-A90-164-080		SW,TACT SKQNAB(N)
S305	87-A90-164-080		SW,TACT SKQNAB(N)
S306	87-A90-164-080		SW,TACT SKQNAB(N)
S307	87-A90-164-080		SW,TACT SKQNAB(N)
S309	87-A90-164-080		SW,TACT SKQNAB(N)
S310	87-A90-164-080		SW,TACT SKQNAB(N)
S311	87-A90-164-080		SW,TACT SKQNAB(N)
S312	87-A90-164-080		SW,TACT SKQNAB(N)
S313	87-A90-164-080		SW,TACT SKQNAB(N)
S314	87-A90-164-080		SW,TACT SKQNAB(N)
S315	87-A90-164-080		SW,TACT SKQNAB(N)
S316	87-A90-164-080		SW,TACT SKQNAB(N)
S317	87-A90-164-080		SW,TACT SKQNAB(N)
S318	87-A90-164-080		SW,TACT SKQNAB(N)
S319	87-A90-164-080		SW,TACT SKQNAB(N)
S320	87-A90-164-080		SW,TACT SKQNAB(N)
S328	87-A90-164-080		SW,TACT SKQNAB(N)
S329	87-A90-164-080		SW,TACT SKQNAB(N)
S330	87-A90-164-080		SW,TACT SKQNAB(N)
S331	87-A90-164-080		SW,TACT SKQNAB(N)
S332	87-A90-164-080		SW,TACT SKQNAB(N)
S337	87-A90-164-080		SW,TACT SKQNAB(N)
S339	87-A90-164-080		SW,TACT SKQNAB(N)<30EZ,35EZ>
S340	87-A90-164-080		SW,TACT SKQNAB(N)<30EZ,35EZ>
S341	87-A90-164-080		SW,TACT SKQNAB(N)<30EZ,35EZ>
SW101	87-A90-535-010		SW,RTRY EC16B24304-WO
VR601	86-NFA-607-010		VR,RTRY 10K15AX1<EXCEPT HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF

AC1 C.B<EZ,K,V>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠F101	87-035-364-010		FUSE,1.6A 250V T<EZ,K,V>
⚠FC1	87-A90-505-010		FUSE CLAMP,TP00351<EZ,K,V>
⚠FC2	87-A90-505-010		FUSE CLAMP,TP00351<EZ,K,V>
⚠PT101	87-NF7-610-010		PT,7NF-7 EZ<EZ,V>
⚠PT101	87-NF7-614-010		PT,7NF-7 K<K>
⚠T1	87-A60-317-010		TERMINAL, 1P MSC<EZ,K,V>
⚠T2	87-A60-317-010		TERMINAL, 1P MSC<EZ,K,V>

AC2 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠PR1	87-A90-195-080		PROTECTOR,7A 491SERIES 125V<36HR>
⚠PR1	87-A00-261-080		RES,M/F 0.56-1W J<32HR,EZ,K,V>
⚠PR2	87-A90-195-080		PROTECTOR,7A 491SERIES 125V<36HR>
⚠PR2	87-A00-261-080		RES,M/F 0.56-1W J<32HR,EZ,K,V>
⚠PR5	87-A90-195-080		PROTECTOR,7A 491SERIES 125V<EZ,K,V>
⚠PR5	87-026-682-080		PROTECTOR,10A 491SERIES 60V<HR>
⚠PR6	87-A90-195-080		PROTECTOR,7A 491SERIES 125V<EZ,K,V>
⚠PR6	87-026-682-080		PROTECTOR,10A 491SERIES 60V<HR>

PT C.B<HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠F101	87-035-367-010		FUSE,T3.15A 250V T<32HR>
⚠F101	87-035-368-010		FUSE,4A 250V T<36HR>
⚠FC1	87-033-147-010		FUSE CLAMP,MT-20
⚠FC2	87-033-147-010		FUSE CLAMP,MT-20
⚠PT101	87-NF7-613-010		PT,7NF-7 HR(L)<32HR>
⚠PT101	87-NF7-606-010		PT,7NF-7 HR<36HR>
⚠SW1	87-A90-165-010		SW,SL 1-2-3 SWS2301
⚠T1	87-A60-317-010		TERMINAL, 1P MSC
⚠T2	87-A60-317-010		TERMINAL, 1P MSC

DECK C.B<36HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON502	87-099-756-019		CONN, 15P 9604 S F
SFR1	87-024-581-019		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-010		SOL ASSY, 27
SOL2	82-ZM1-618-010		SOL ASSY, 27
SW1	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW9	87-036-110-010		SW,MICRO SPPB62
W001	82-ZM3-601-019		RBN,CORD,4P-75

DECK C.B<EXCEPT 36HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON301	86-ZM3-604-019		CON ASSY,3P-PB
CON351	86-ZM3-605-019		CON ASSY,8P-RPB
CON502	87-099-753-019		CONN,11P H 9604
SFR1	87-024-581-089		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-010		SOL ASSY, 27
SOL2	82-ZM1-618-010		SOL ASSY, 27
SW1	87-A90-248-010		SW, MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW, MICRO ESE11SH2CXQ
SW3	87-A90-248-010		SW, MICRO ESE11SH2CXQ
SW4	87-A90-248-010		SW, MICRO ESE11SH2CXQ
SW5	87-A90-248-010		SW, MICRO ESE11SH2CXQ
W1	82-ZM3-601-019		RBN-CORD,4P-75

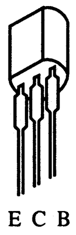
HEAD-1 C.B<36HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-602-010		PWB,FLEX A

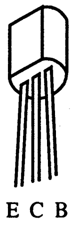
HEAD-2 C.B<36HR>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-602-010		PWB,FLEX A

TRANSISTOR ILLUSTRATION



KTA1266GR
KTC3198GR



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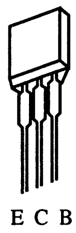

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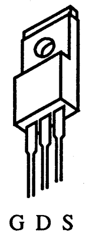

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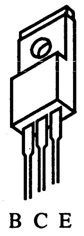

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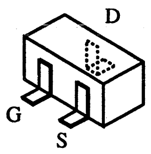
FN1016
FP1016



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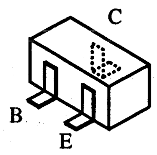

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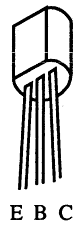
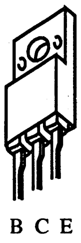
2SA1235
RT1N141
CSA1362
RT1N144
CSD1306
CMBT5551
RT1P144
RT1P141



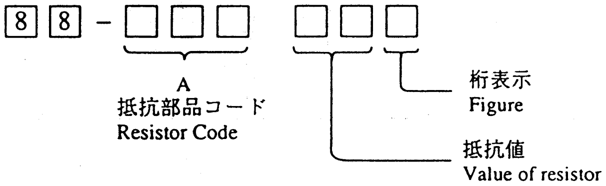
C2N5401



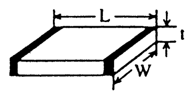
2SB1626
2SD2495

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

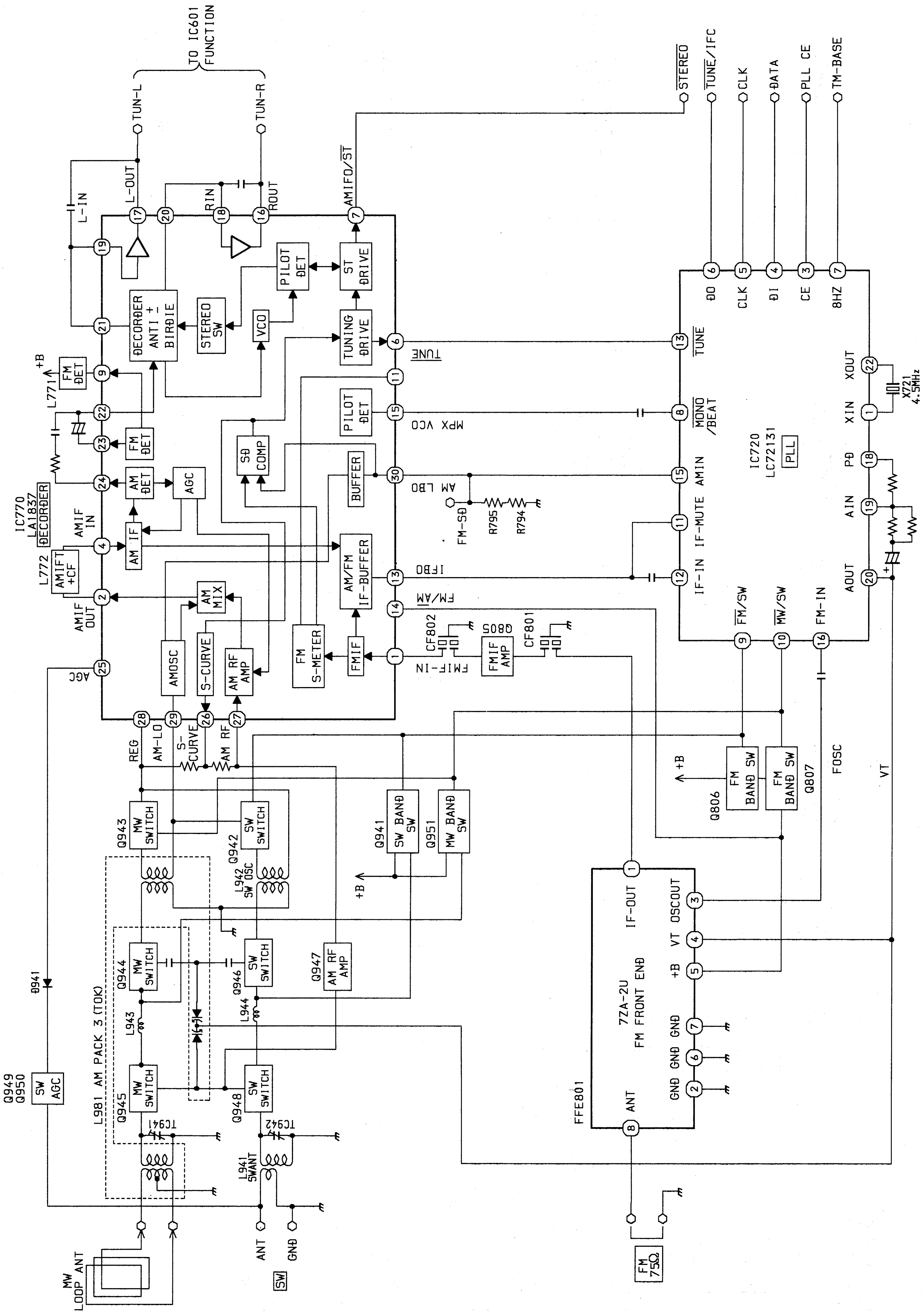
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 - □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

チップ抵抗
Chip resistor

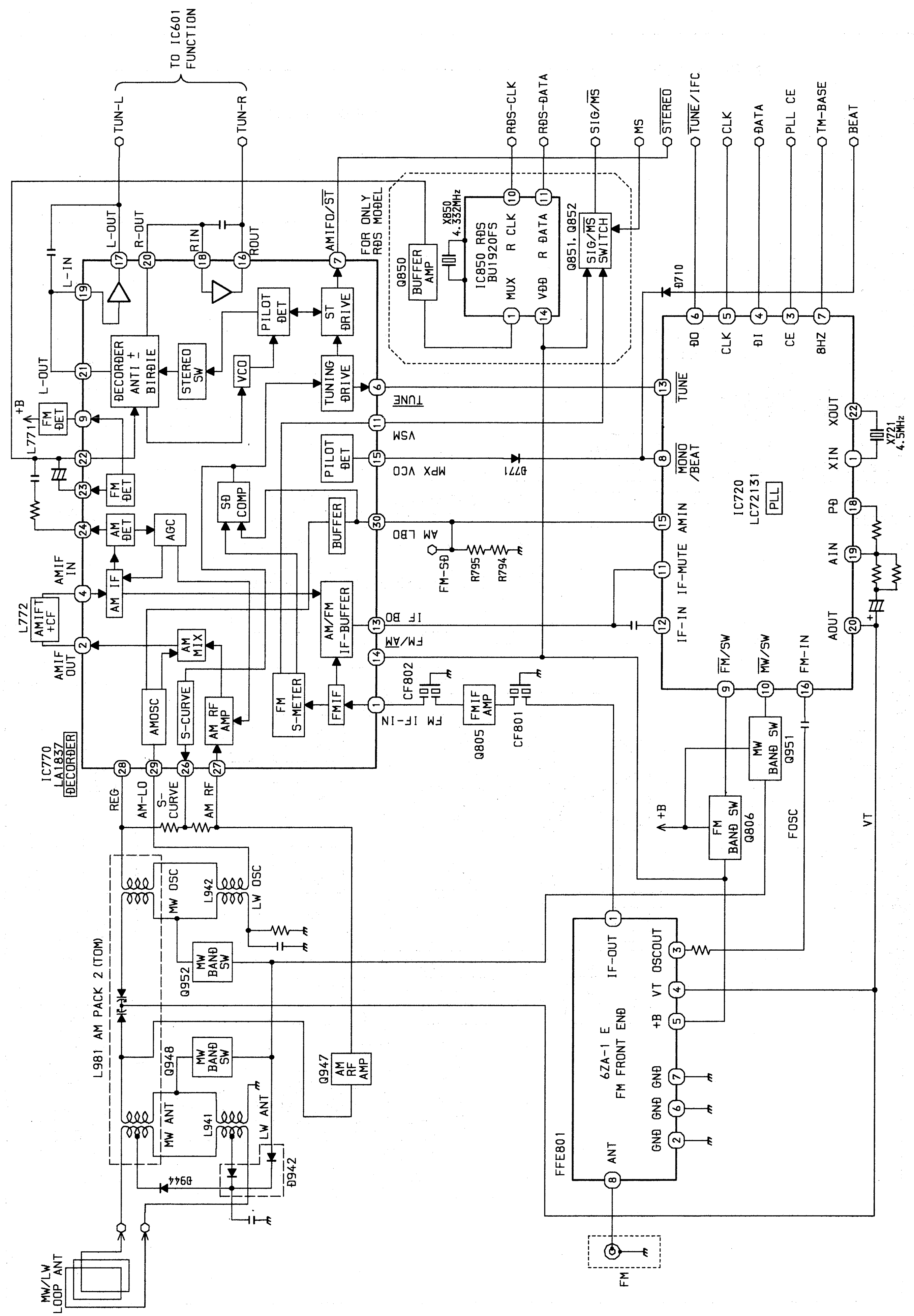
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード ：A Resistor Code: A
				外形／Form	L	W	t	
1／16W	1608	±5%	CJ		1.6	0.8	0.45	108
1／10W	2125	±5%	CJ		2	1.25	0.45	118
1／8W	3216	±5%	CJ		3.2	1.6	0.55	128

BLOCK DIAGRAM – 1 (TUNER : HR)

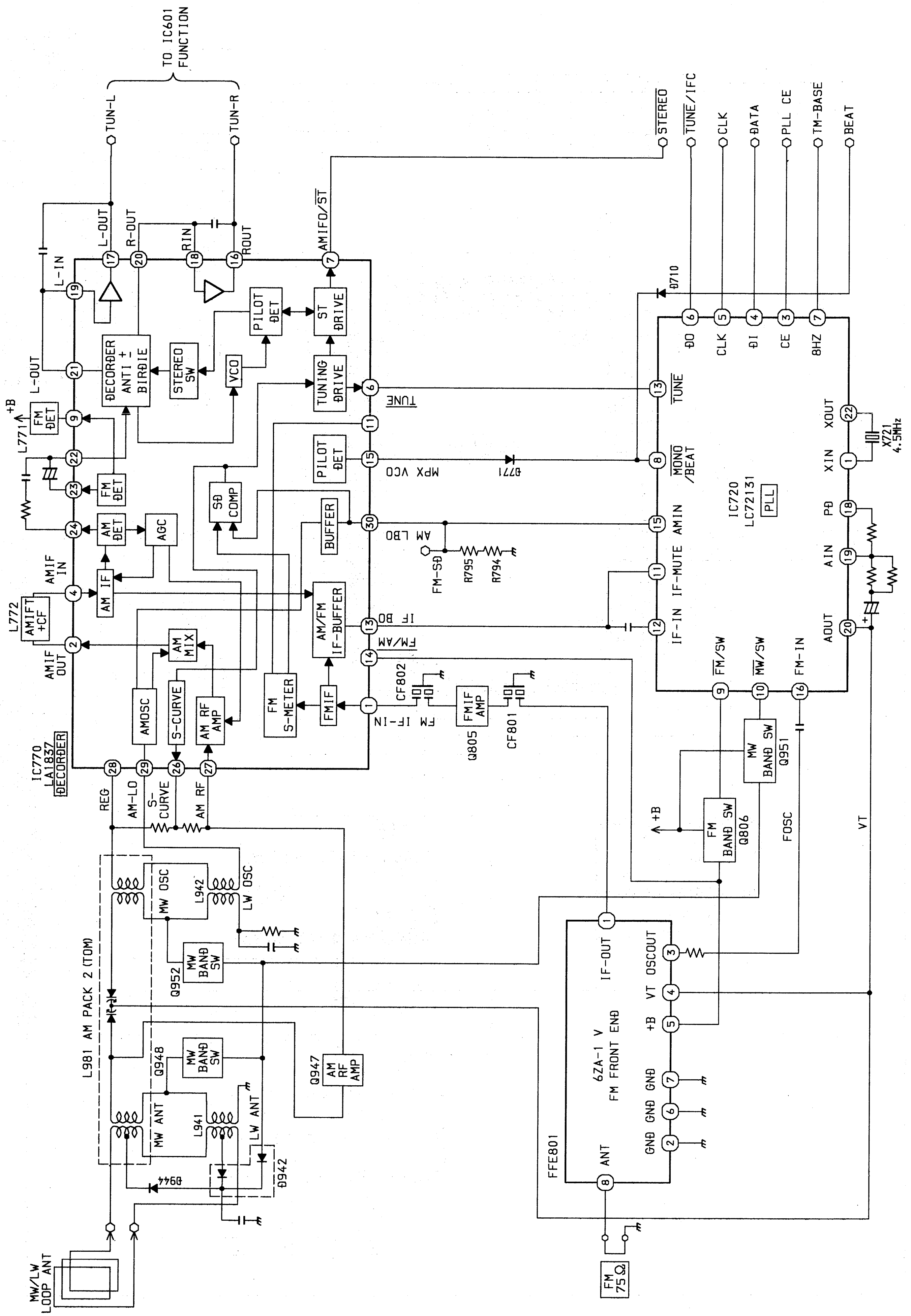


TO IC601 FUNCTION
TUN-L
TUN-R
L-OUT
L-IN
RIN
ROUT
AMIFO/ST
STEREO
TUNE/IFC
CLK
DATA
PLL CE
TM-BASE
DECORDER ANTI ÷ BIRDIE
STEREO SW
VCO
PILOT DET
ST DRIVE
TUNING DRIVE
TUNE
FM DET
AM DET
AGC
SD COMP
BUFFER
MPX VCO
AM LBO
FM-SD
R795
R794
AMIF IN
AM IF
AM/FM IF-BUFFER
IFBO
FM/AM
AMIF OUT
AM MIX
AMOSC
S-CURVE
AM RF AMP
FM S-METER
FMIF
FMIF-IN
CF802
Q805
FMIF AMP
CF801
IC770 LA1837 DECORDER
L771
L772
AMIFT +CF
+B
AGC
REG
AM-LO
S-CURVE
AM RF
IC720 LC72131 PLL
DO
CLK
DI
CE
8HZ
XOUT
XIN
X721 4.5MHz
PD
AIN
AOUT
AMIN
IF-MUTE
IF-IN
MONO /BEAT
FM/SW
MW/SW
FM-IN
Q806
FM BAND SW
Q807
FOSC
VT
Q943 MW SWITCH
Q942 SW SWITCH
L942 SW OSC
Q941 SW BAND SW
Q951 MW BAND SW
Q944 MW SWITCH
Q946 SW SWITCH
Q947 AM RF AMP
L943
L944
Q945 MW SWITCH
Q948 SW SWITCH
L981 AM PACK 3 (TOK)
TC941
TC942
L941 SWANT
D941
Q949 Q950 SW AGC
FFE801
7ZA-2U FM FRONT END
IF-OUT
OSCOUT
VT
+B
GND
ANT
MW LOOP ANT
ANT
GND
SW
FM 75Ω

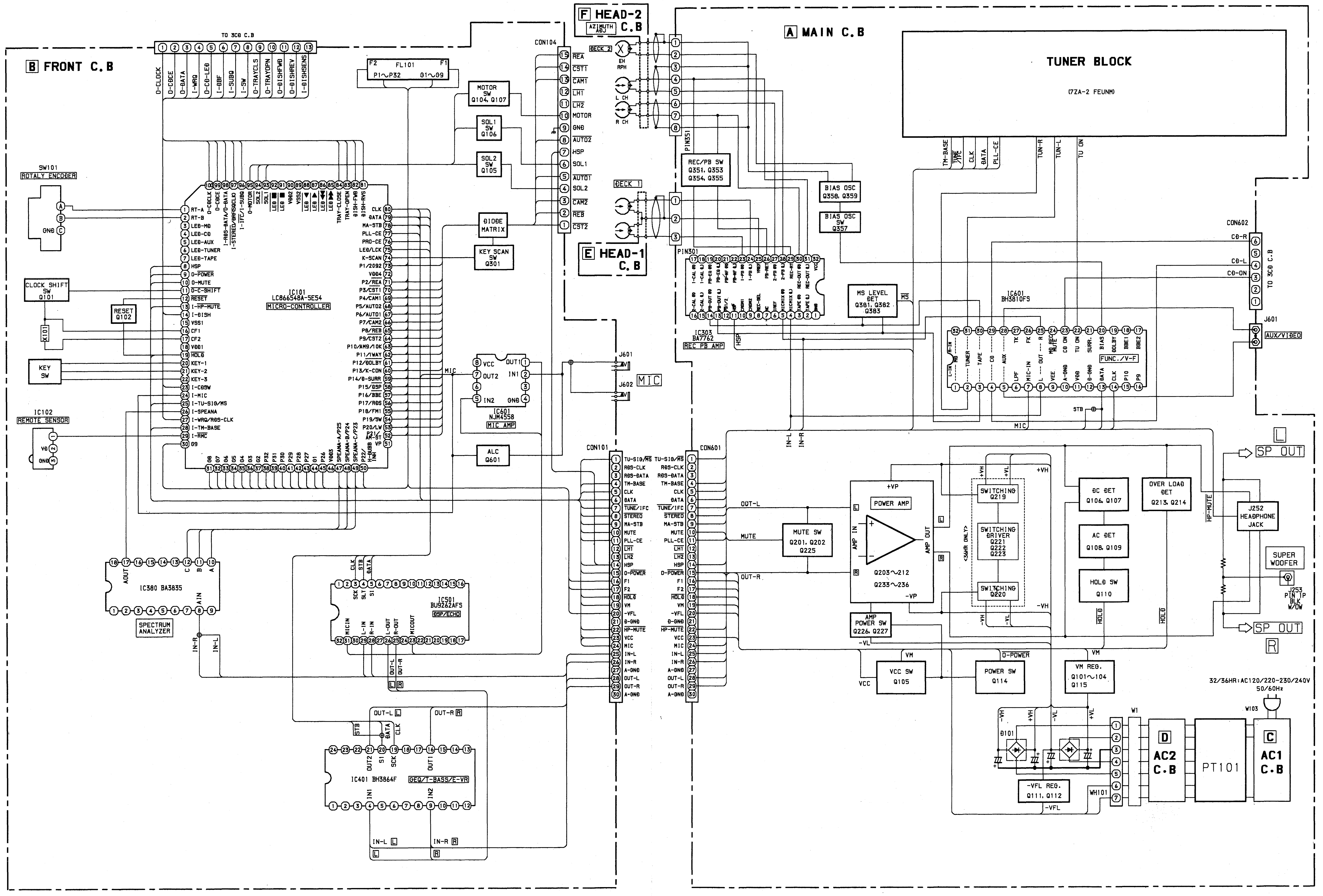
BLOCK DIAGRAM – 2 (TUNER : 30EZ, 33EZ, 35EZ, K)


TO IC601 FUNCTION
TUN-L
TUN-R
RDS-CLK
RDS-DATA
SIG/MS
MS
STEREO
TUNE/IFC
CLK
DATA
PLL CE
TM-BASE
BEAT
FOR ONLY RDS MODEL
Q850 BUFFER AMP
X850 4.332MHz
IC850 RDS BU1920FS
Q851, Q852 SIG/MS SWITCH
DECORDER ANTI ± BIRDIE
STEREO SW
VCO
PILOT DET
ST DRIVE
TUNING DRIVE
FM DET
AM DET
AGC
SD COMP
BUFFER
AM IF
AM MIX
AMOSC
S-CURVE
AM RF AMP
FM S-METER
FMIF
AM/FM IF-BUFFER
FMIF AMP
CF801
CF802
Q805
IC770 LA1837 DECORDER
L771
L772 AMIFT +CF
AMIF IN
AMIF OUT
REG
AM-LO
S-CURVE
AM RF
IC720 LC72131 PLL
X721 4.5MHz
MONO /BEAT
IF-IN
IF-MUTE
AMIN
XOUT
XIN
PD
AIN
AOUT
FM/SW
MW/SW
FM-IN
TUNE
VSM
MPX VCO
AM LBO
IF BO
FM/AM
FM IF-IN
FM-SD
R795
R794
D710
D771
Q951 MW BAND SW
Q806 FM BAND SW
+B
FOSC
VT
L981 AM PACK 2 (TOM)
MW OSC
L942
LW OSC
Q952 MW BAND SW
Q948 MW BAND SW
Q947 AM RF AMP
MW ANT
L941
LW ANT
D942
D944
FFE801
6ZA-1 E FM FRONT END
IF-OUT
OSCOUT
ANT
GND
MW/LW LOOP ANT
FM

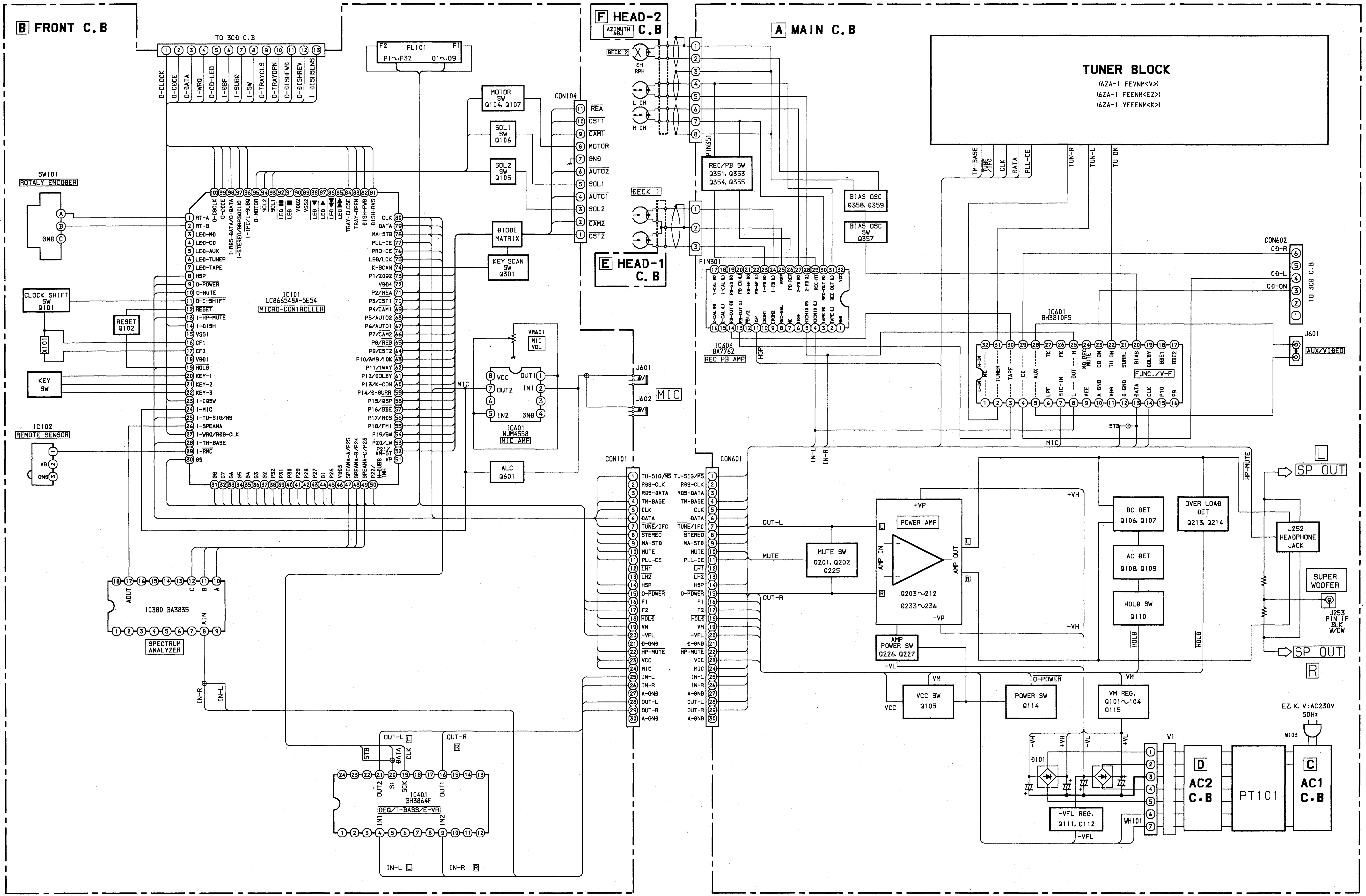
BLOCK DIAGRAM – 3 (TUNER : V)


TO IC601 FUNCTION
TUN-L
TUN-R
STEREO
TUNE/IFC
CLK
DATA
PLL CE
TM-BASE
BEAT
DECORDER ANTI ± BIRDIE
STEREO SW
VCO
PILOT DET
ST DRIVE
TUNING DRIVE
FM DET
AM DET
AGC
SD COMP
BUFFER
AM IF
AM MIX
AMOSC
S-CURVE
AM RF AMP
FM S-METER
FMIF
AM/FM IF-BUFFER
FMIF AMP
CF801
CF802
Q805
IC770 LA1837 DECORDER
IC720 LC72131 PLL
X721 4.5MHz
Q951 MW BAND SW
Q806 FM BAND SW
FOSC
VT
L981 AM PACK 2 (TOM)
Q952 MW BAND SW
Q948 MW BAND SW
Q947 AM RF AMP
FFE801
6ZA-1 V FM FRONT END
MW/LW LOOP ANT
FM 75Ω

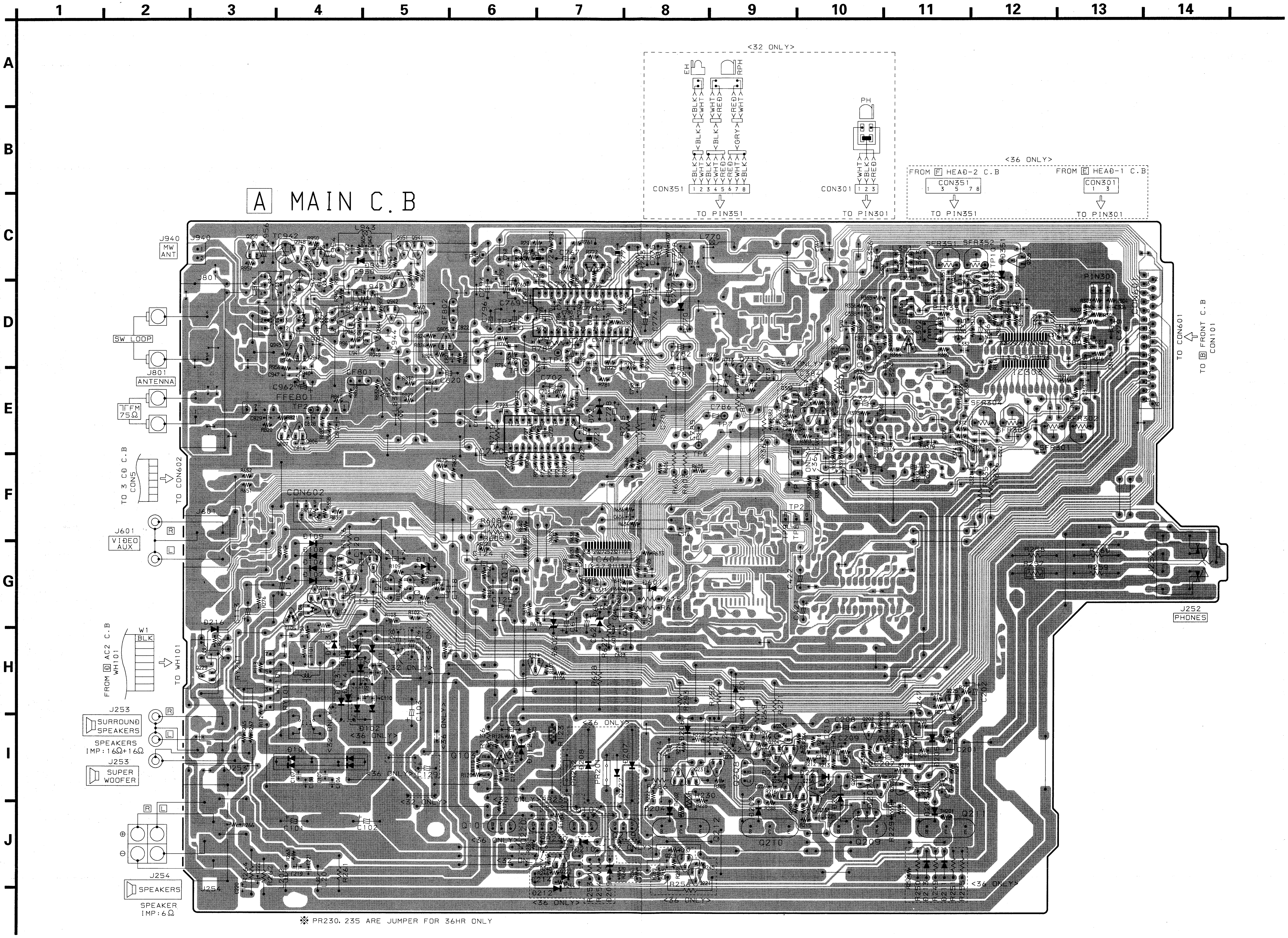
BLOCK DIAGRAM – 4 (MAIN : HR)


B FRONT C.B
TO 3C0 C.B
O-CLOCK
O-CDCE
O-DATA
I-WRQ
O-C0-LED
I-DBF
I-SUBQ
I-SW
O-TRAYCLS
O-TRAYOPN
O-DISHFWD
O-DISHREV
I-DISHSENS
FL101
P1～P32 G1～G9
SW101
ROTALY ENCODER
GND
CLOCK SHIFT SW Q101
X101
RESET Q102
KEY SW
IC102
REMOTE SENSOR
VD
GND
IC101
LC866548A-5E54
MICRO-CONTROLLER
MOTOR SW Q104, Q107
SOL1 SW Q106
SOL2 SW Q105
DIODE MATRIX
KEY SCAN SW Q301
IC601
NJM4558
MIC AMP
VCC
OUT1
OUT2
IN1
IN2
GND
MIC
J601
J602
ALC Q601
CON104
REA
CST1
CAM1
LH1
LH2
MOTOR
GND
AUTO2
HSP
SOL1
AUTO1
SOL2
CAM2
REB
CST2
F HEAD-2 C.B
AZIMUTH ADJ
DECK 2
EH
RPH
L CH
R CH
DECK 1
E HEAD-1 C.B
A MAIN C.B
TUNER BLOCK
(7ZA-2 FEUNM)
TM-BASE
TUNE/IFC
CLK
DATA
PLL-CE
TUN-R
TUN-L
TU ON
PIN351
REC/PB SW Q351, Q353 Q354, Q355
BIAS OSC Q358, Q359
BIAS OSC SW Q357
PIN301
IC303
BA7762
REC PB AMP
HSP
MS LEVEL DET Q381, Q382 Q383
MS
IC601
BH3810FS
FUNC./V-F
STB
CON602
CD-R
CD-L
CD-ON
TO 3C0 C.B
J601
AUX/VIDEO
CON101
CON601
TU-SID/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
IC380 BA3835
SPECTRUM ANALYZER
IC501
BU9262AF5
DSP/ECHO
IC401 BH3864F
GEQ/T-BASS/E-VR
IN-L L
IN-R R
MUTE SW Q201, Q202 Q225
+VP
POWER AMP
AMP IN
AMP OUT
Q203～212
Q233～236
-VP
AMP POWER SW Q226, Q227
SWITCHING Q219
SWITCHING DRIVER Q221 Q222 Q223
<36HR ONLY>
SWITCHING Q220
DC DET Q106, Q107
AC DET Q108, Q109
HOLD SW Q110
OVER LOAD DET Q213, Q214
HP-MUTE
J252 HEADPHONE JACK
SUPER WOOFER
J253 PIN JP BLK W/OW
L SP OUT
SP OUT R
VCC SW Q105
POWER SW Q114
VM REG. Q101～104 Q115
32/36HR:AC120/220-230/240V 50/60Hz
W1
W103
D101
-VFL REG. Q111, Q112
WH101
D AC2 C.B
PT101
C AC1 C.B

BLOCK DIAGRAM – 5 (MAIN : 30EZ, 33EZ, 35EZ, K, V)


B FRONT C.B
TO 3CD C.B
FL101
SW101
ROTALY ENCODER
CLOCK SHIFT SW Q101
RESET Q102
X101
KEY SW
IC102
REMOTE SENSOR
IC101
LC866548A-5E54
MICRO-CONTROLLER
MOTOR SW Q104, Q107
SOL1 SW Q106
SOL2 SW Q105
DIODE MATRIX
KEY SCAN SW Q301
CON104
VR601 MIC VOL
IC601
NJM4558
MIC AMP
ALC Q601
J601
J602
MIC
IC380 BA3835
SPECTRUM ANALYZER
IC401
BH3864F
GEQ/T-BASS/E-VR
CON101
F HEAD-2 C.B
AZIMUTH ADJ
DECK 2
DECK 1
E HEAD-1 C.B
A MAIN C.B
TUNER BLOCK
(6ZA-1 FEVNM<V>)
(6ZA-1 FEENM<EZ>)
(6ZA-1 YFEENM<K>)
PIN351
REC/PB SW Q351, Q353 Q354, Q355
BIAS OSC Q358, Q359
BIAS OSC SW Q357
PIN301
IC303
BA7762
REC PB AMP
IC601
BH3810FS
FUNC./V-F
CON602
TO 3CD C.B
J601
AUX/VIDEO
CON601
MUTE SW Q201, Q202 Q225
POWER AMP
Q203∼212
Q233∼236
AMP POWER SW Q226, Q227
DC DET Q106, Q107
OVER LOAD DET Q213, Q214
AC DET Q108, Q109
HOLD SW Q110
J252 HEADPHONE JACK
SUPER WOOFER
J253 PIN JP BLK W/OW
SP OUT L
SP OUT R
VCC SW Q105
POWER SW Q114
VM REG. Q101∼104 Q115
EZ, K, V:AC230V 50Hz
W103
W1
D101
-VFL REG. Q111, Q112
WH101
D AC2 C.B
PT101
C AC1 C.B

WIRING – 1 (MAIN : HR)


1
2
3
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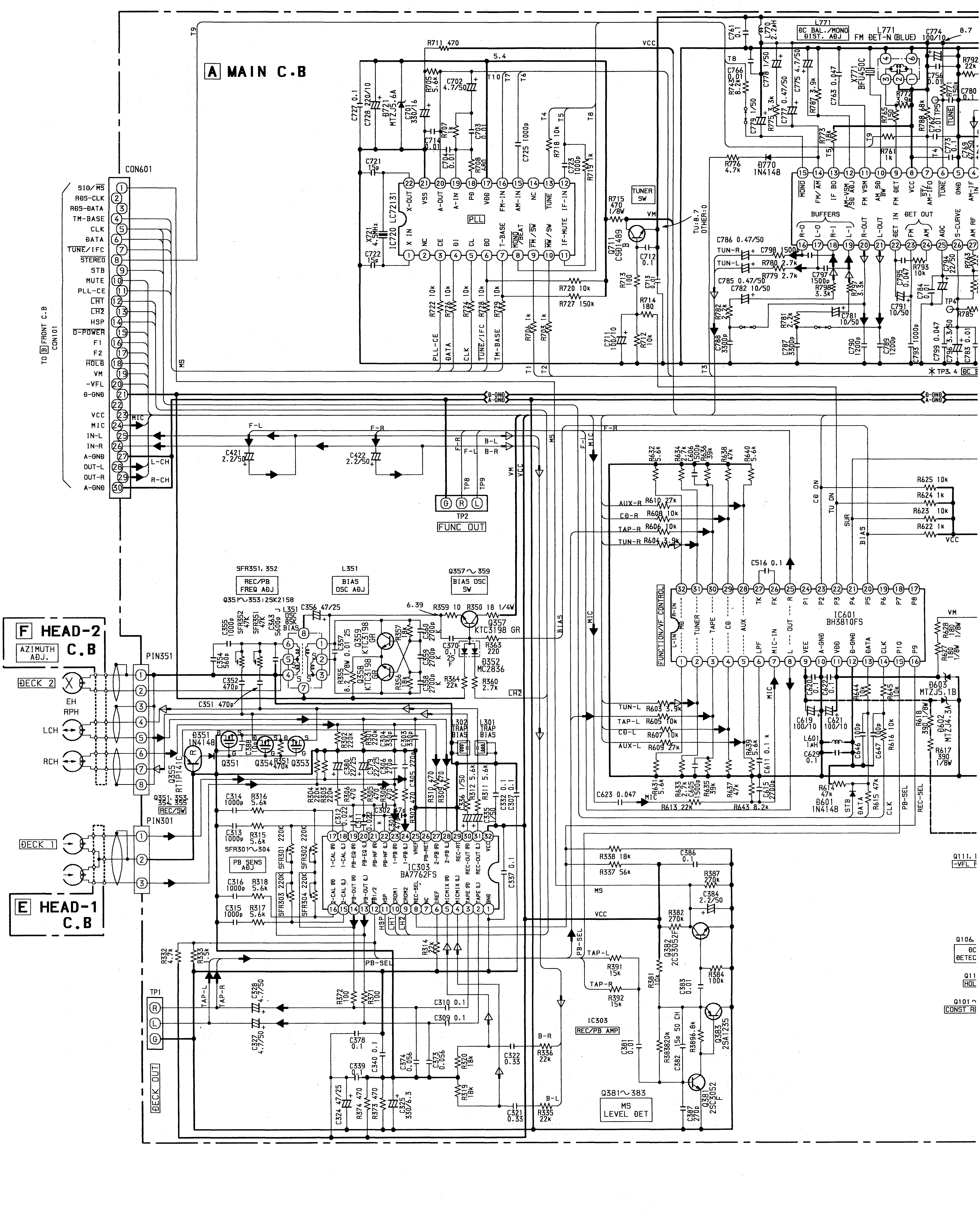
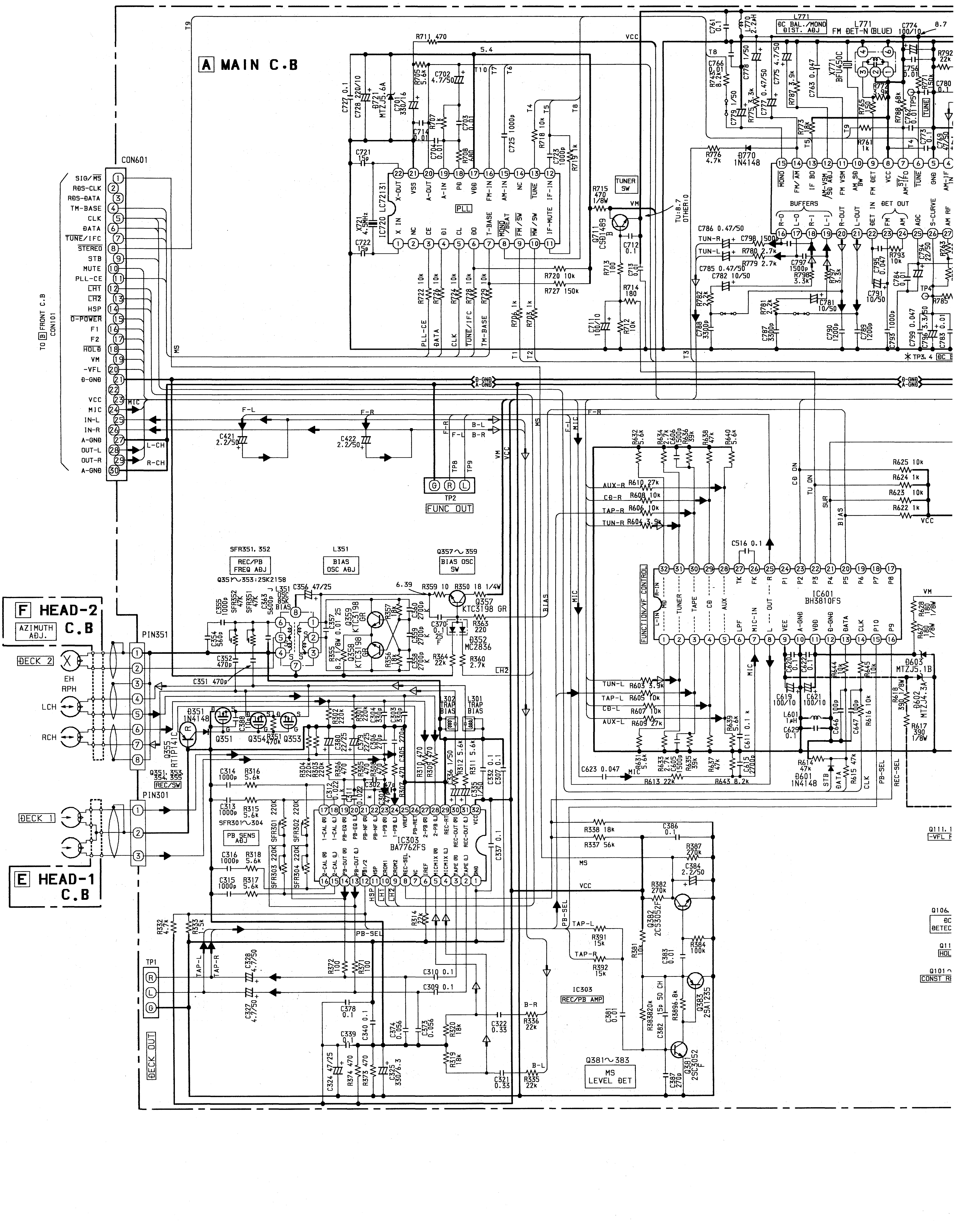
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
A MAIN C.B
<32 ONLY>
EH
RPH
PH
CON351
CON301
TO PIN351
TO PIN301
<36 ONLY>
FROM F HEAD-2 C.B
FROM E HEAD-1 C.B
TO CON601
TO B FRONT C.B CON101
J940
MW ANT
SW LOOP
J801
ANTENNA
FM 75Ω
TO 3 CD C.B CON5
TO CON602
J601
VIDEO AUX
R
L
W1
BLK
FROM D AC2 C.B WH101
TO WH101
J253
SURROUND SPEAKERS
SPEAKERS IMP:16Ω+16Ω
J253
SUPER WOOFER
J254
SPEAKERS
SPEAKER IMP:6Ω
J252
PHONES
CON602
IC601
PIN301
IC301
IC302
L770
L943
TC942
Q210
Q209
Q211
Q212
Q101
Q102
Q201
<36 ONLY>
<32 ONLY>

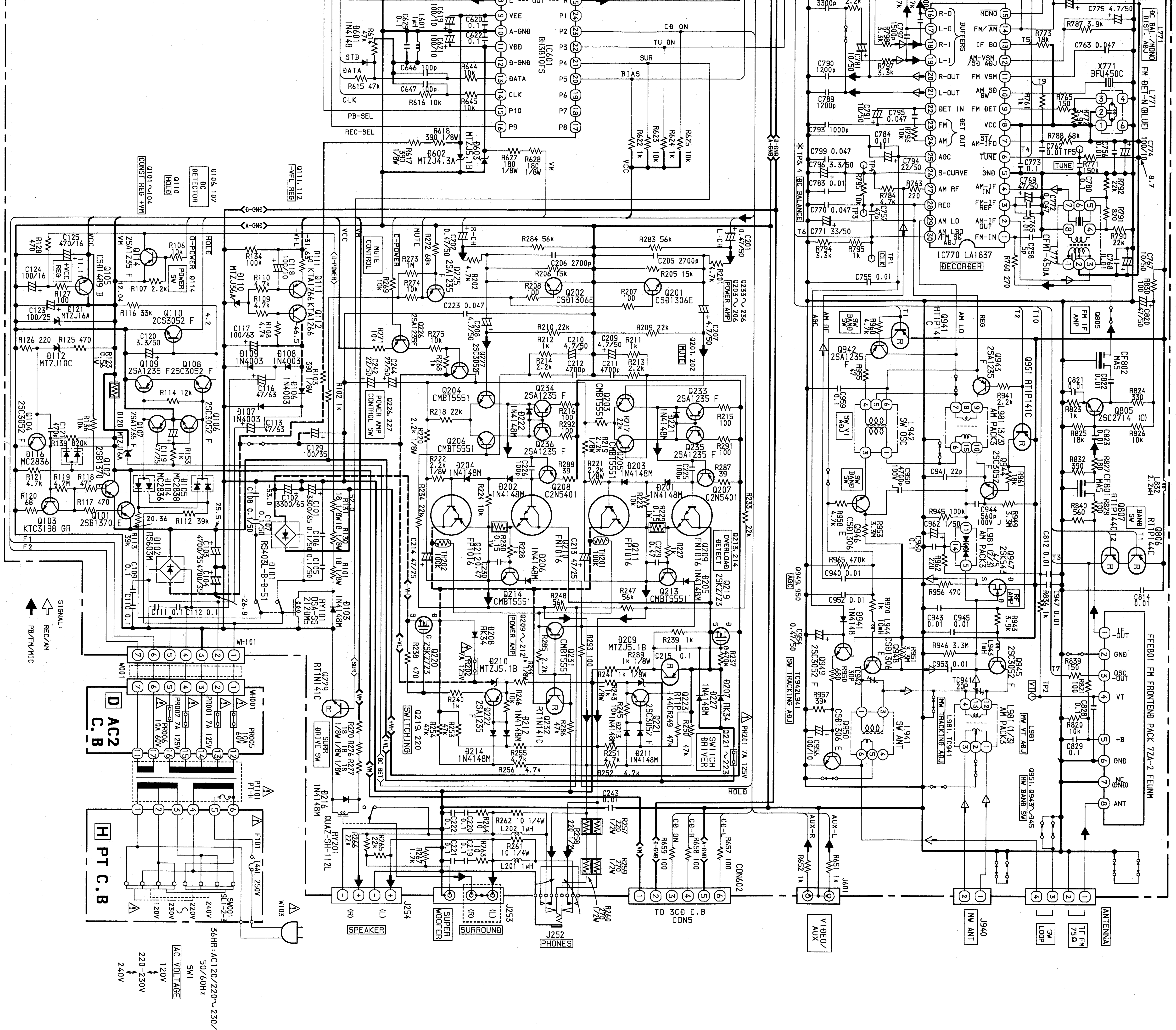
※ PR230, 235 ARE JUMPER FOR 36HR ONLY

SCHEMATIC DIAGRAM – 1 (MAIN : 36HR)

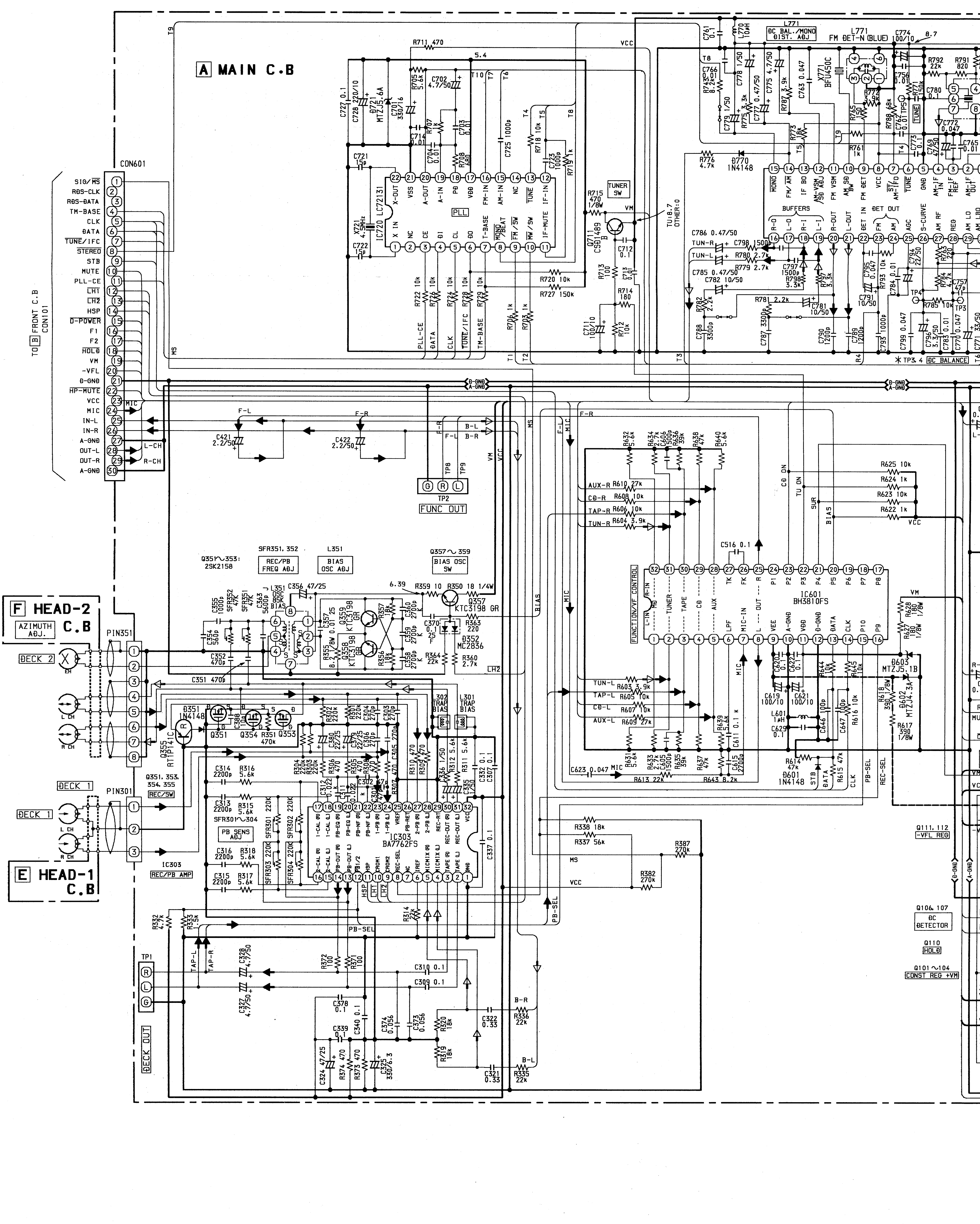

A MAIN C.B
F HEAD-2 C.B
AZIMUTH ADJ.
E HEAD-1 C.B
DECK 1
DECK 2
EH
RPH
LCH
RCH
PIN351
PIN301
CON601
TO B FRONT C.B CON101
SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
IC720 LC72131
PLL
IC303 BA7762FS
IC601 BH3810FS
FUNCTION/VF CONTROL
TP1
DECK OUT
TP2
FUNC OUT
REC/PB FREQ ADJ
BIAS OSC ADJ
BIAS OSC SW
PB SENS ADJ
REC/PB AMP
MS LEVEL DET
TUNER SW
REC/SW
Q351~353:2SK2158
Q357~359
Q381~383
L351
SFR351, 352
SFR301~304
Q355 RT1P141C
Q711 CSD1489
X721 4.5MHz
X771 BFU450C
L771 FM DET-N (BLUE)
DC BAL./MONO DIST. ADJ
TU:8.7 OTHER:0
BUFFERS
*TP3, 4

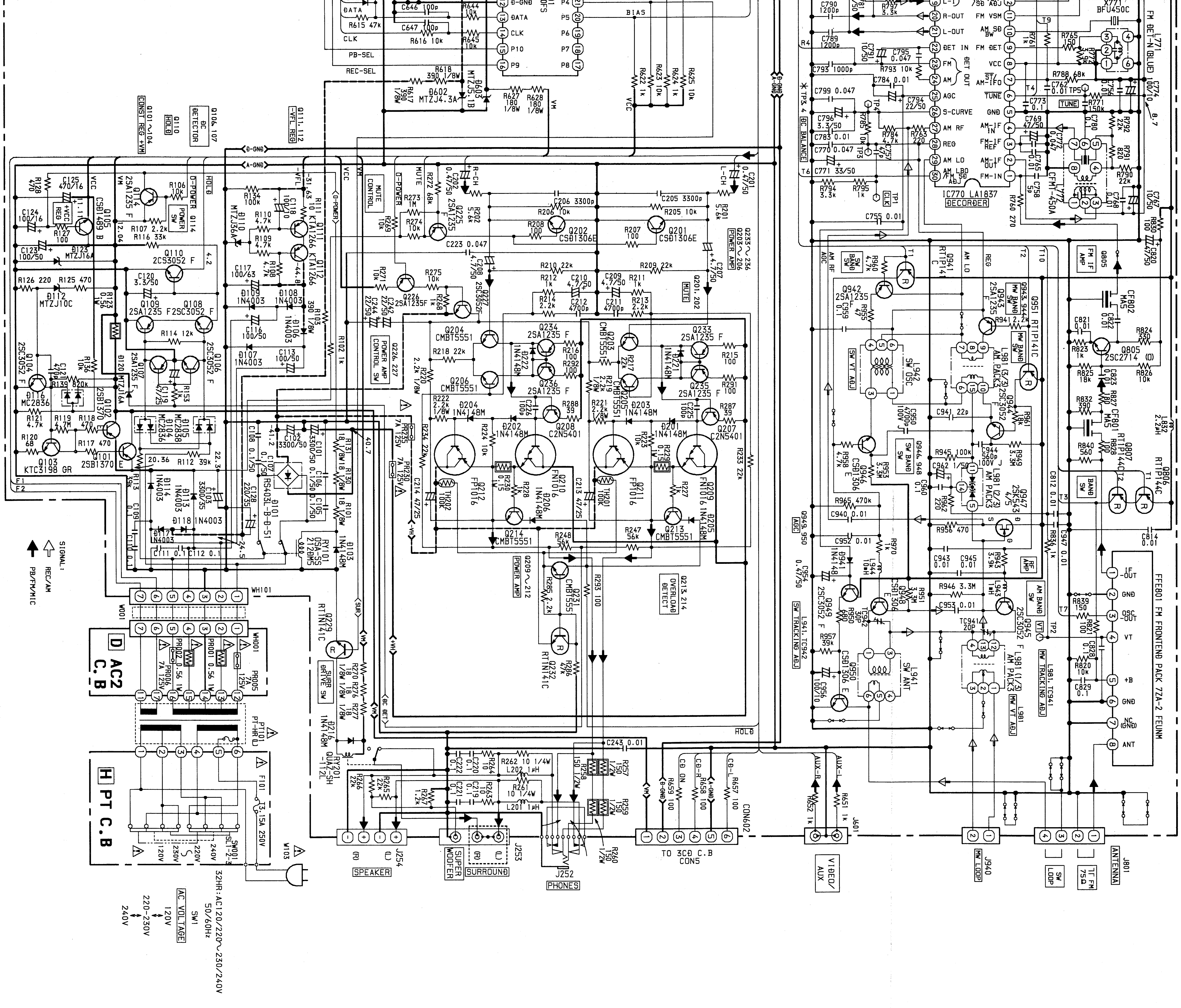
SCHEMATIC DIAGRAM – 1 (MAIN : 36HR)


A MAIN C.B
E HEAD-1 C.B
F HEAD-2 C.B
AZIMUTH ADJ.
DECK 1
DECK 2
EH
RPH
LCH
RCH
PIN301
PIN351
TO B FRONT C.B CON101
CON601
SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
STB
MUTE
PLL-CE
CH1
CH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
L-CH
R-CH
IC720 LC72131
PLL
X721 4.5MHz
Q711 CSD1489
TUNER SW
TU:8.7 OTHER:0
BUFFERS
X771 BFU450C
L771 DC BAL./MONO DIST. ADJ
L771 FM DET-N (BLUE)
TP2
FUNC OUT
SFR351, 352 REC/PB FREQ ADJ
L351 BIAS OSC ADJ
Q357～359 BIAS OSC SW
Q351～353:2SK2158
Q357 KTC3198 GR
Q358 KTC3198 GR
Q359 KTC3198 GR
D352 MC2836
Q355 RT1P141C
D351 1N4148
Q351, 353, 354, 355 REC/SW
L302 TRAP BIAS
L301 TRAP BIAS
IC303 BA7762FS
SFR301～304
PB SENS ADJ
IC601 BH3810FS
FUNCTION/VF CONTROL
D603 MTZJ5.1B
D602 MTZJ4.3A
D601 1N4148
IC303 REC/PB AMP
Q381～383 MS LEVEL DET
Q381 2SC3052 F
Q382 2SC3052F
Q383 2SA1235
TP1
DECK OUT
PB-SEL
REC-SEL
BIAS
MS
VCC


IC601 BH3810FS
IC770 LA1837
DECORDER
BUFFERS
FFE801 FM FRONTEND PACK 7ZA-2 FEUNM
CONST REG VM
DC DETECTOR
HOLD
VFL REG
MUTE CONTROL
POWER AMP CONTROL SW
POWER AMP
OVERLOAD DETECT
MUTE
SWITCHING
SWITCH DRIVER
SURR DRIVE SW
DC BALANCE
DC BAL./MONO BIST. ADJ.
FM DET-N (BLUE)
CLK
TUNE
AGC
SW BAND SW
SW VT ADJ
MW TRACKING ADJ
SW TRACKING ADJ
MW VT ADJ
MW BAND SW
FM IF AMP
RF AMP
D AC2 C.B
H PT C.B
SPEAKER
(R)
(L)
J254
SUPER WOOFER
SURROUND
J253
J252
PHONES
TO 3CD C.B
CON5
CON602
VIDEO/AUX
J601
MW ANT
J940
SW LOOP
FM 75Ω
ANTENNA
SIGNAL:
REC/AM
PB/FM/MIC
AC VOLTAGE
SW1
120V
220-230V
240V
36HR:AC120/220~230/240V
50/60Hz
F101
T4AL 250V
PT101
W103

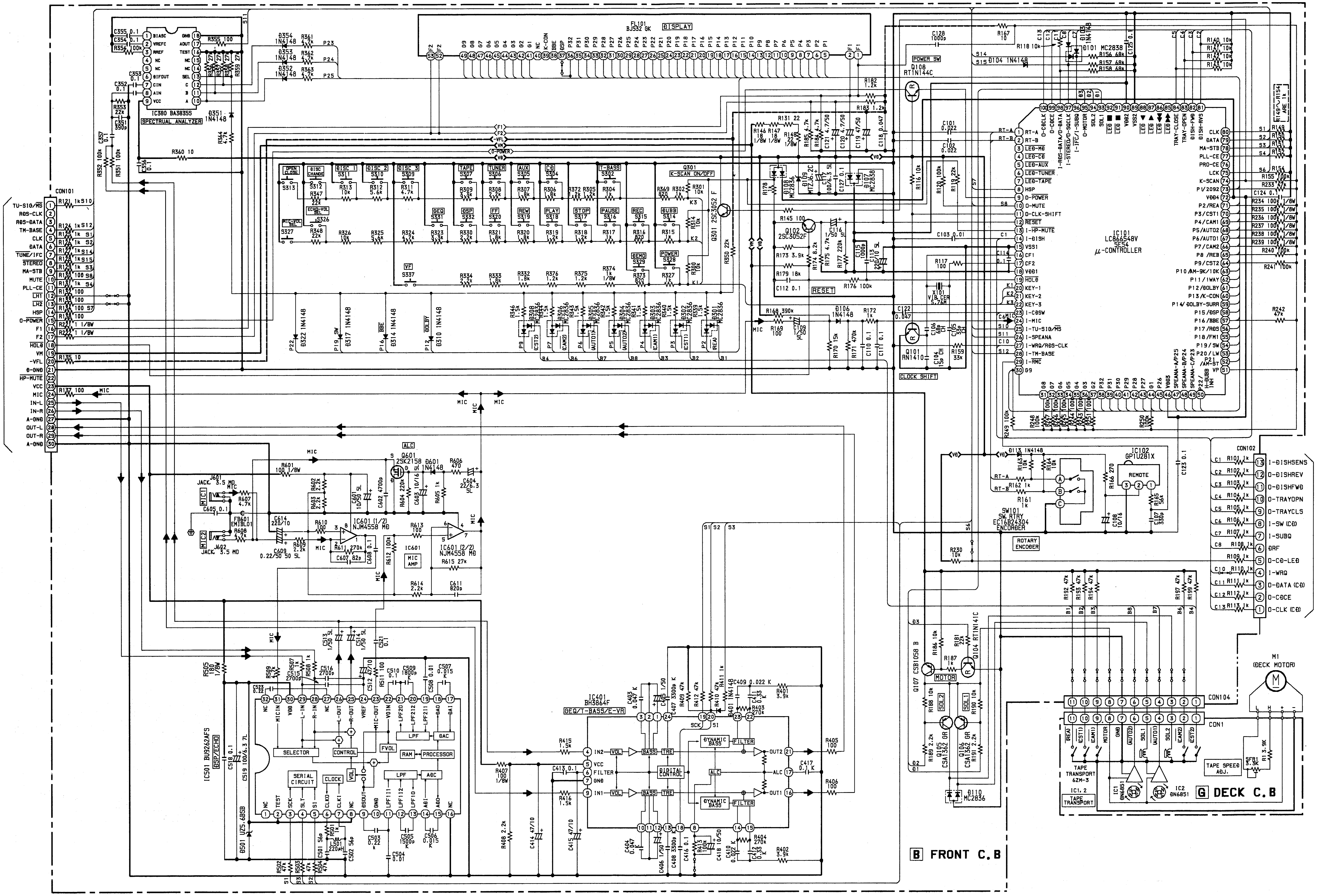
SCHEMATIC DIAGRAM – 2 (MAIN : 32HR)


A MAIN C.B
TO B FRONT C.B CON101
CON601
SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
STB
MUTE
PLL-CE
CH1
CH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
L-CH
R-CH
IC720 LC72131
X721 4.5MHz
PLL
Q711 CSD1489
TUNER SW
TU:8.7 OTHER:0
BUFFERS
DET OUT
X771 BFU450C
DC BAL./MONO DIST. ADJ
L771 FM DET-N (BLUE)
TP3, 4 DC BALANCE
F-L
F-R
B-L
B-R
TP8
TP9
TP2
FUNC OUT
IC601 BH3810FS
FUNCTION/VF CONTROL
L-IN
R-IN
MD
TUNER
TAPE
CD
AUX
LPF
MIC-IN
L --- OUT --- R
VEE
A-GND
VDD
D-GND
DATA
CLK
P10
P9
CD ON
TU ON
SUR
BIAS
Q351~353: 2SK2158
SFR351, 352 REC/PB FREQ ADJ
L351 BIAS OSC ADJ
Q357~359 BIAS OSC SW
Q357 KTC3198 GR
Q358 KTC3198 GR
Q359 KTC3198 GR
Q352 MC2836
F HEAD-2 C.B
AZIMUTH ADJ.
PIN351
DECK 2
E HEAD-1 C.B
PIN301
DECK 1
L CH
R CH
EH
Q355 RT1P141C
D351 1N4148
Q351, 353, 354, 355 REC/SW
IC303 REC/PB AMP
IC303 BA7762FS
SFR301~304
PB SENS ADJ
L302 TRAP BIAS
L301 TRAP BIAS
TP1
DECK OUT
TAP-L
TAP-R
PB-SEL
MS
VCC
VM
MIC
REC-SEL
D601 1N4148
D602 MTZJ4.3A
D603 MTZJ5.1B
D-GND
A-GND
Q111, 112 -VFL REG
Q106, 107 DC DETECTOR
Q110 HOLD
Q101~104 CONST REG +VM



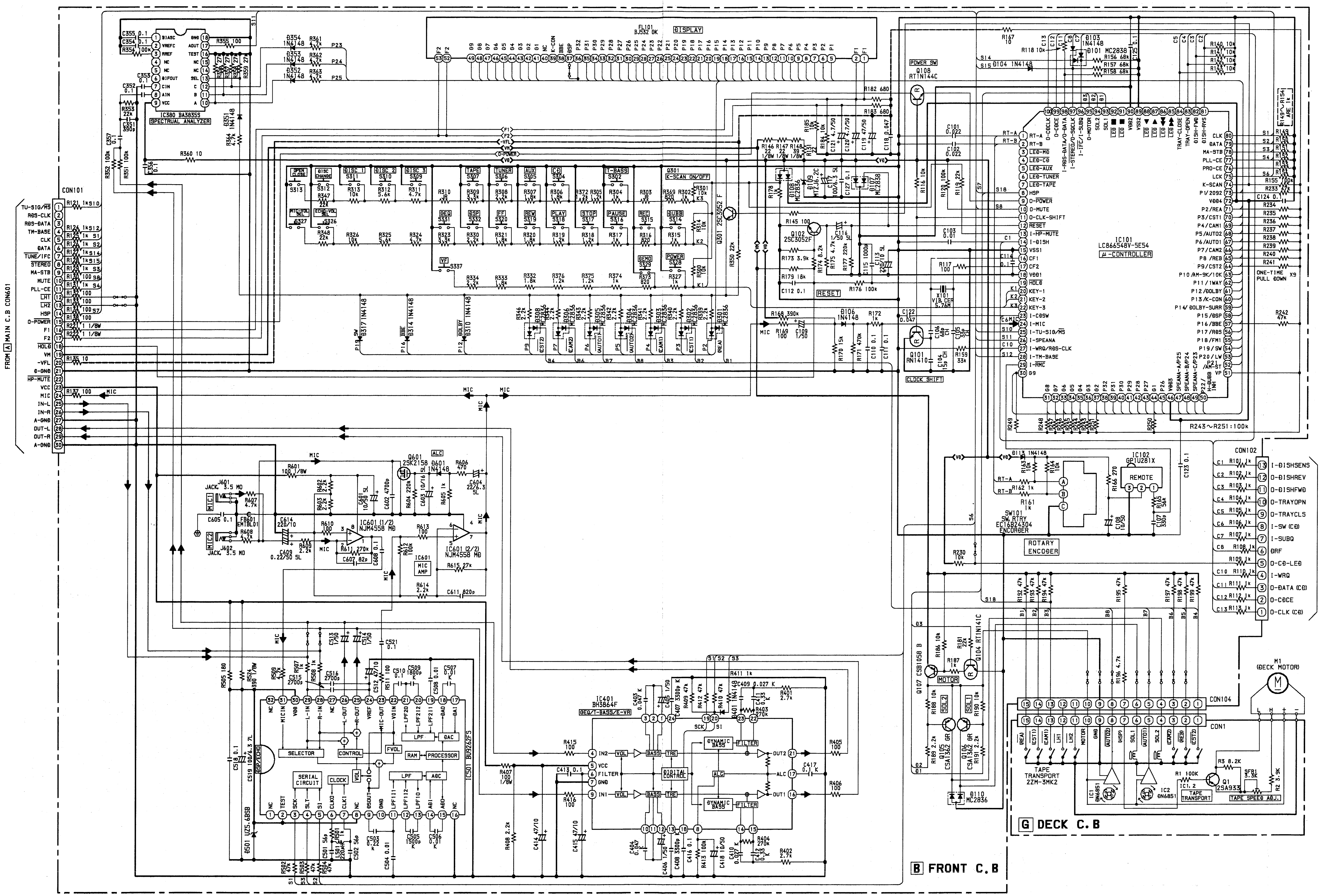
D AC2 C.B
H PT C.B
WH101
WO01
PT101 PT-HR (L)
F101 3.15A 250V
SW001 SLT-2-3
32HR: AC120/220~230/240V 50/60Hz
AC VOLTAGE SW1
120V
220-230V
240V
W103
SIGNAL:
REC/AM
PB/FM/MIC
Q101~104 CONST REG +VM
Q110 HOLD
Q106,107 DC DETECTOR
Q111,112 -VFL REG
D-POWER Q114
POWER SW
MUTE CONTROL
POWER AMP CONTROL SW
Q226,227
Q201,202 MUTE
Q203~206 Q233~236 POWER AMP
Q209~212 POWER AMP
Q213,214 OVERLOAD DETECT
Q229 RT1N141C
SURR DRIVE SW
RY101 OSA-SS 212DM5
RY201 QUAZ-SH -112L
Q231 CMBT5551
Q232 RT1N141C
Q210 FN1016
Q209 FN1016
Q211 FP1016
Q212 FP1016
Q207 C2N5401
Q208 C2N5401
HOLD
C243 0.01
R-CH
L-CH
SPEAKER
J254
SUPER WOOFER
SURROUND
J253
PHONES
J252
TO 3CD C.B CON5
CON602
VIDEO/AUX
J601
AUX-R
AUX-L
MW LOOP
J940
SW LOOP
TF FM 75Ω
ANTENNA
J801
IC770 LA1837 DECORDER
CFMT-450A
X771 BFU450C
FM DET-N (BLUE) L771
TUNE
DC BALANCE
CLK
FM IF AMP
Q805 2SC2714 (O)
Q806 RT1P144C
Q807 RT1P144C
CF802 MA5
CF801 MA5
SW VT ADJ
SW BAND SW
SW OSC
AM PACK3
SW ANT
SW TRACKING ADJ
MW TRACKING ADJ
MW VT ADJ
AM BAND SW
AGC
RF AMP
FFE801 FM FRONTEND PACK 7ZA-2 FEUNM
IF-OUT
GND
OSC-OUT
VT
+B
NC (GND)
ANT

SCHEMATIC DIAGRAM – 3 (FRONT : 32HR)

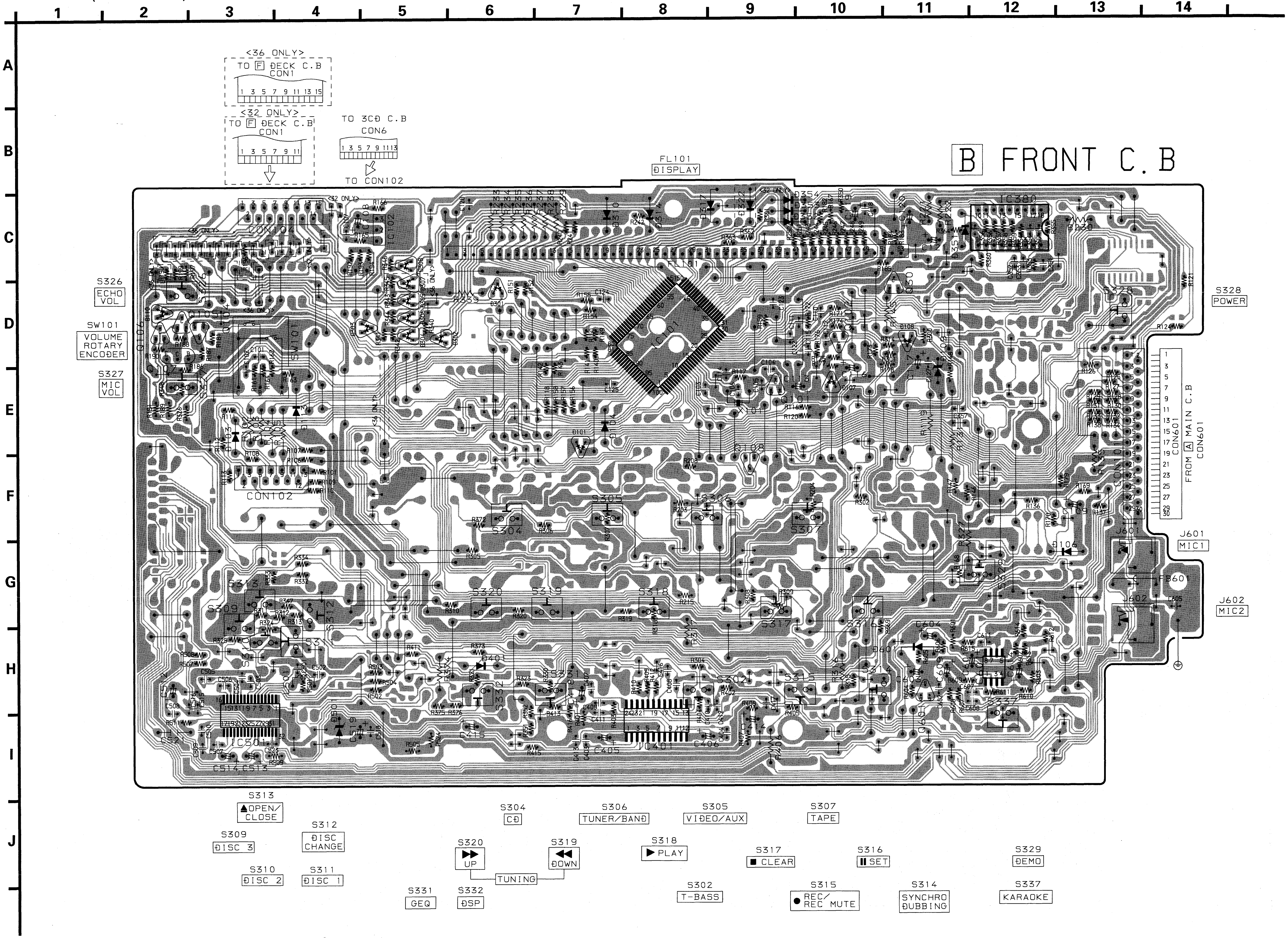


FROM A MAIN C.B CON601
CON101
TU-SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
HSP
O-POWER
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
IC380 BA3835S
SPECTRUAL ANALYZER
FL101 BJ532 GK
DISPLAY
OPEN CLOSE
DISC CHANGE
DISC 1
DISC 2
DISC 3
TAPE
TUNER
AUX
CD
T-BASS
K-SCAN ON/OFF
GEQ
DSP
FF
REW
PLAY
STOP
PAUSE
REC
DUBB
DEMO
POWER
VF
MIC-VOL SEL
ECHO-VOL SEL
Q301 2SC3052 F
RESET
POWER SW
Q108 RT1N144C
Q102 2SC3052F
IC101 LC866548V
μ-CONTROLLER
X101 VIB CER 5.76M
Q101 RN1410
CLOCK SHIFT
IC102 GP1U281X
REMOTE
SW101 SW RTRY EC16B24304 ENCORDER
ROTARY ENCODER
CON102
I-DISHSENS
O-DISHREV
O-DISHFWD
O-TRAYOPN
O-TRAYCLS
I-SW (CD)
I-SUBQ
DRF
O-CD-LED
I-WRQ
O-DATA (CD)
O-CDCE
O-CLK (CD)
TO 3CD C.B CON6
ALC
Q601 2SK2158
D601 1N4148
JACK J601 3.5 MD
MIC1
MIC2
JACK J602 3.5 MD
FB601 EMIBL01
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
MIC AMP
IC501 BU9262AFS
DSP/ECHO
SELECTOR
CONTROL
FVOL
SERIAL CIRCUIT
CLOCK
VOL
LPF
DAC
RAM
PROCESSOR
ADC
D501 UZ5.6BSB
IC401 BH3864F
GEQ/T-BASS/E-VR
VOL
BASS
TRE
DIGITAL CONTROL
DYNAMIC BASS
FILTER
ALC
B FRONT C.B
Q107 CSB1058 B
Q104 RT1N141C
MOTOR
SOL2
SOL1
Q105 CSA1362 GR
Q106 CSA1362 GR
D110 MC2836
CON104
CON1
TAPE TRANSPORT 6ZM-3
IC1, 2 TAPE TRANSPORT
IC1 GN6851
IC2 GN6851
TAPE SPEED ADJ.
SFR1 3.9K
M1 (DECK MOTOR)
G DECK C.B

SCHEMATIC DIAGRAM – 4 (FRONT : 36HR)


FL101 BJ532GK DISPLAY
IC380 BA3835S SPECTRUAL ANALYZER
CON101
FROM A MAIN C.B CON601
TU-SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
OPEN CLOSE
DISC CHANGE
DISC 1
DISC 2
DISC 3
TAPE
TUNER
AUX
CD
T-BASS
K-SCAN ON/OFF
MIC VOL
ECHO VOL
DEQ
DSP
FF
REW
PLAY
STOP
PAUSE
REC
DUBB
DEMO
POWER
VF
POWER SW
RESET
CLOCK SHIFT
IC101 LC866548V-5E54 μ-CONTROLLER
X101 VIB.CER 5.76M
ONE-TIME PULL DOWN
IC102 GP1U281X REMOTE
SW101 SW.RTRY EC16B24304 ENCODER
ROTARY ENCODER
CON102
TO SCD C.B CON6
I-DISHSENS
O-DISHREV
O-DISHFWD
O-TRAYOPN
O-TRAYCLS
I-SW (CD)
I-SUBQ
DRF
O-CD-LED
I-WRQ
O-DATA (CD)
O-CDCE
O-CLK (CD)
Q601 2SK2158
ALC
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
IC601 MIC AMP
J601 JACK 3.5 MD
J602 JACK 3.5 MD
MIC1
MIC2
IC501 BU9262FS
SELECTOR
CONTROL
FVOL
LPF
DAC
RAM
PROCESSOR
SERIAL CIRCUIT
CLOCK
VOL
ADC
D501 UZ5.6BSB
DSP/ECHO
IC401 BH3864F
DEQ/T-BASS/E-VR
DYNAMIC BASS
FILTER
DIGITAL CONTROL
ALC
BASS
TRE
M1 (DECK MOTOR)
CON104
CON1
TAPE TRANSPORT 2ZM-3MK2
TAPE SPEED ADJ.
MOTOR
SOL2
SOL1
Q107 CSB1058 B
Q104 RT1N141C
Q105 CSA1362 GR
Q106 CSA1362 GR
D110 MC2836
G DECK C.B
B FRONT C.B

WIRING – 2 (FRONT : HR)


1
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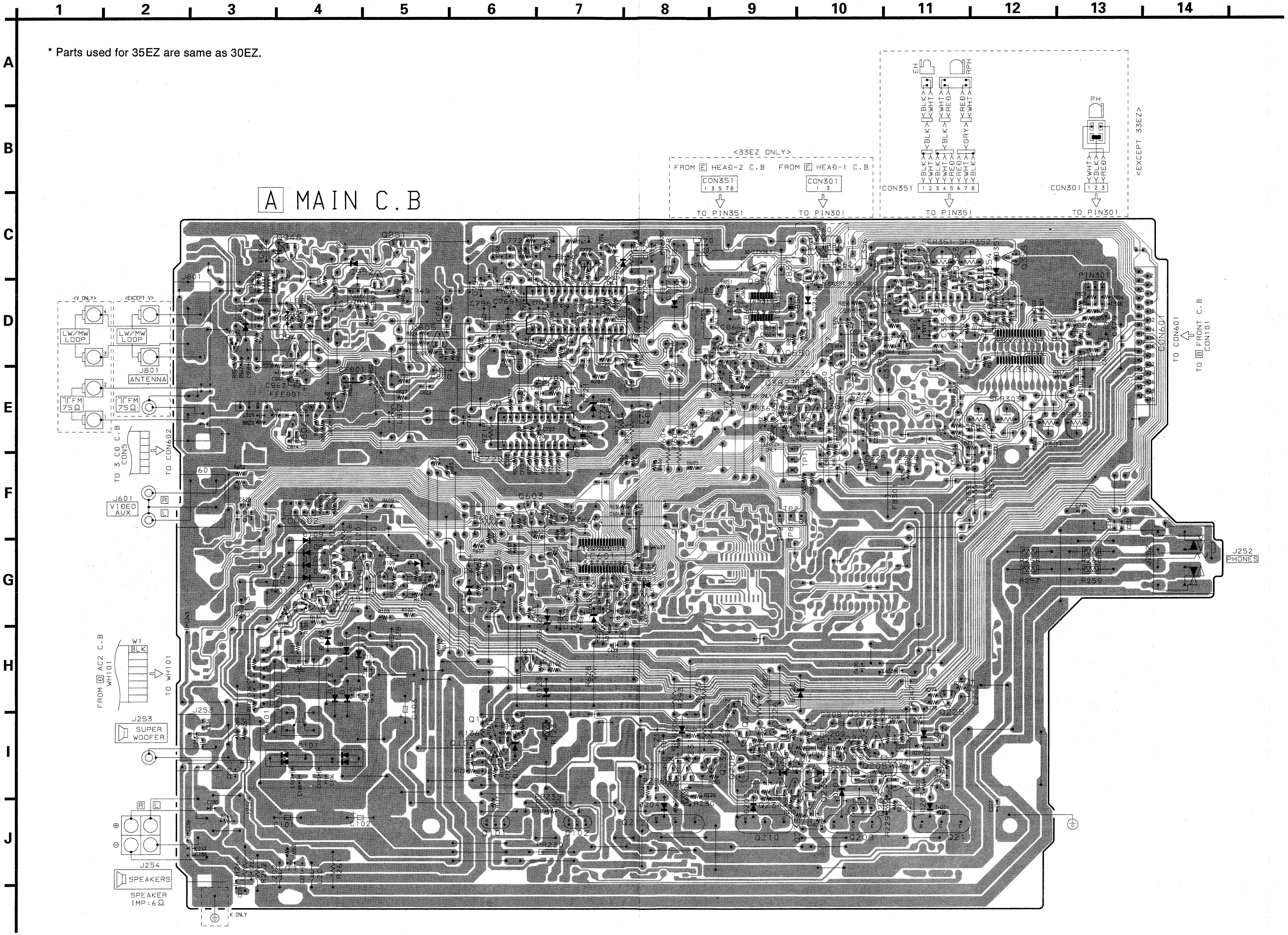
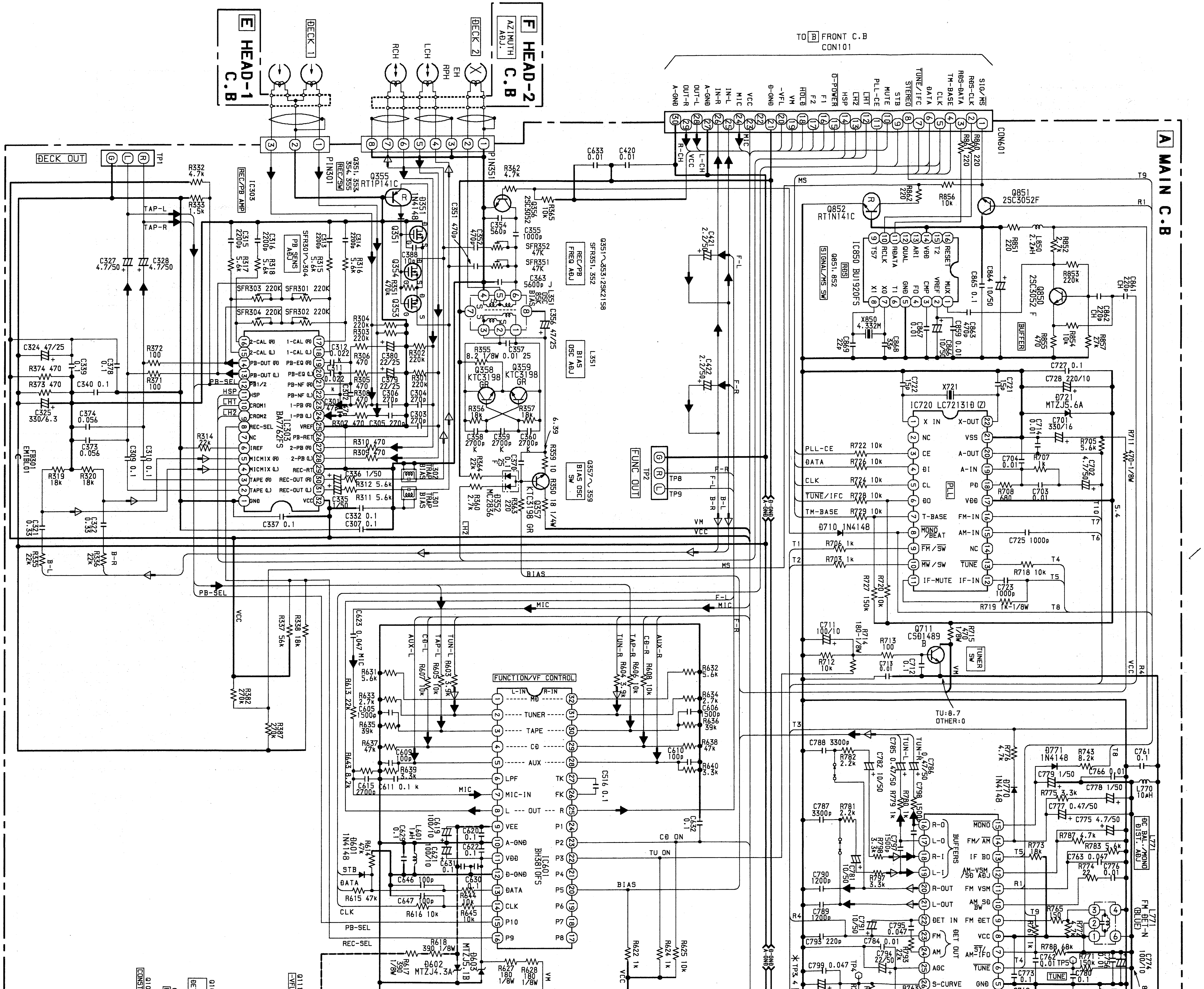
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
<36 ONLY>
TO F DECK C.B
CON1
1 3 5 7 9 11 13 15
<32 ONLY>
TO F DECK C.B
CON1
1 3 5 7 9 11
TO 3CD C.B
CON6
1 3 5 7 9 11 13
TO CON102
FL101
DISPLAY
B FRONT C.B
CON104
CON102
IC101
IC380
IC401
IC501
FL101
SW101
S326
ECHO VOL
SW101
VOLUME ROTARY ENCODER
S327
MIC VOL
S328
POWER
FROM A MAIN C.B
CON601
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
30
CON101
J601
MIC1
J602
MIC2
FB601
S304
S305
S306
S307
S309
S310
S311
S312
S313
S314
S315
S316
S317
S318
S319
S320
S329
S331
S332
S337
S302
S313
▲OPEN/CLOSE
S309
DISC 3
S312
DISC CHANGE
S310
DISC 2
S311
DISC 1
S304
CD
S306
TUNER/BAND
S305
VIDEO/AUX
S307
TAPE
S320
▶▶ UP
S319
◀◀ DOWN
TUNING
S318
▶ PLAY
S317
■ CLEAR
S316
II SET
S329
DEMO
S331
GEQ
S332
DSP
S302
T-BASS
S315
● REC/REC MUTE
S314
SYNCHRO DUBBING
S337
KARAOKE

WIRING – 3 (MAIN : 30EZ, 33EZ, 35EZ, K, V)

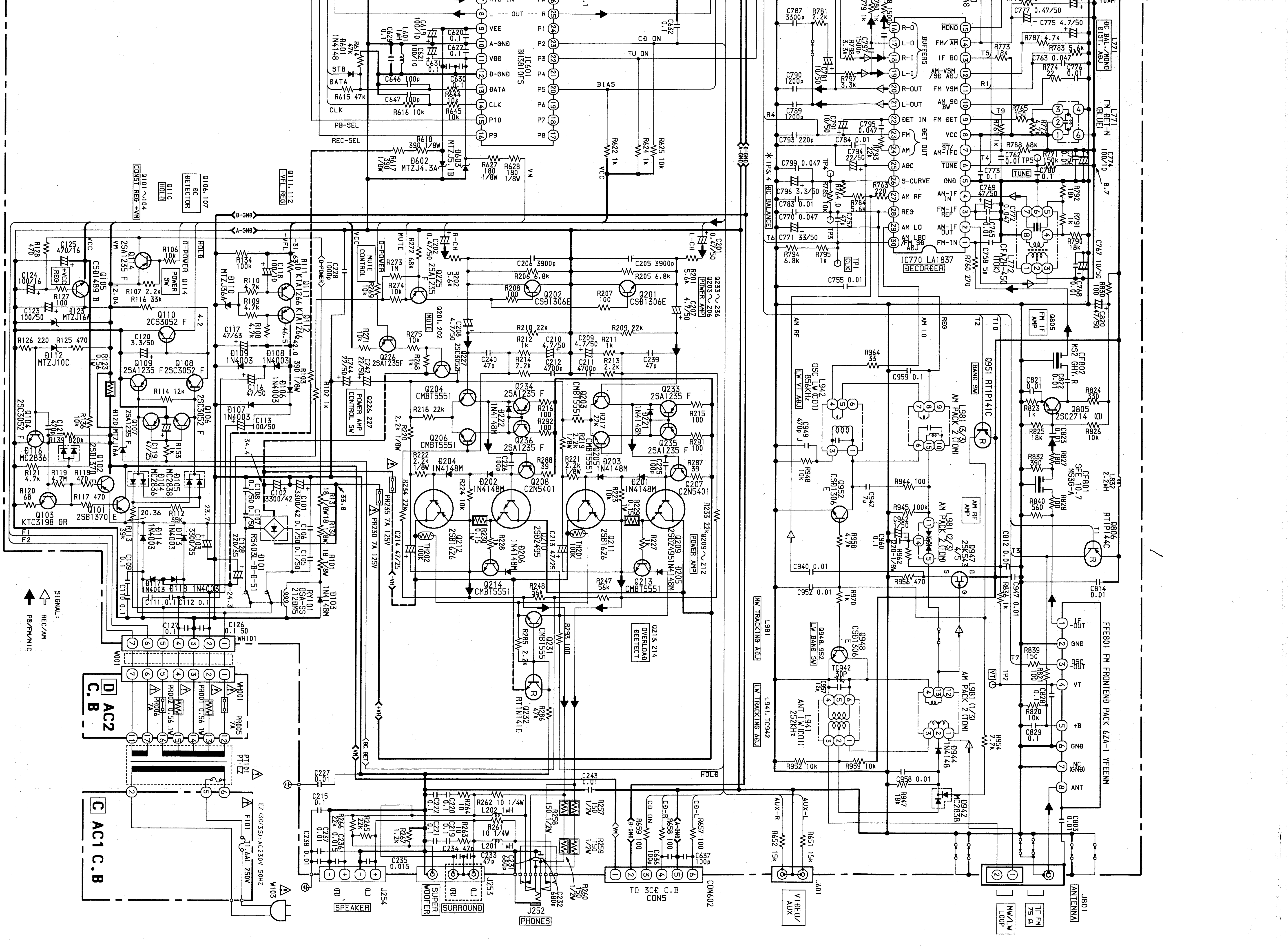
* Parts used for 35EZ are same as 30EZ.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
A MAIN C.B
<33EZ ONLY>
FROM E HEAD-2 C.B
FROM E HEAD-1 C.B
CON351
1 3 5 7 8
CON301
1 3
TO PIN351
TO PIN301
EH
RPH
PH
<BLK>
<WHT>
<RED>
<GRY>
CON351
1 2 3 4 5 6 7 8
CON301
1 2 3
<EXCEPT 33EZ>
<V ONLY>
<EXCEPT V>
LW/MW LOOP
J801
ANTENNA
FM 75Ω
TO 3 CG C.B CON5
TO CON602
J601
VIDEO AUX
R
L
FROM D AC2 C.B WH101
W1
BLK
TO WH101
J253
SUPER WOOFER
R
L
⊕
⊖
J254
SPEAKERS
SPEAKER IMP:6Ω
K ONLY
TO CON601
TO B FRONT C.B CON101
CON601
J252
PHONES
PIN301
IC303
SFR351
SFR352
SFR303
SFR302
SFR301
IC601
Q951
Q952
Q805
Q850
Q381
Q101
Q102
Q225
Q209
Q210
Q211
R257
R258
R259
R260
PR230
PR235
C101
C102
C103
D101
TP1
TP2
L851
FFE601

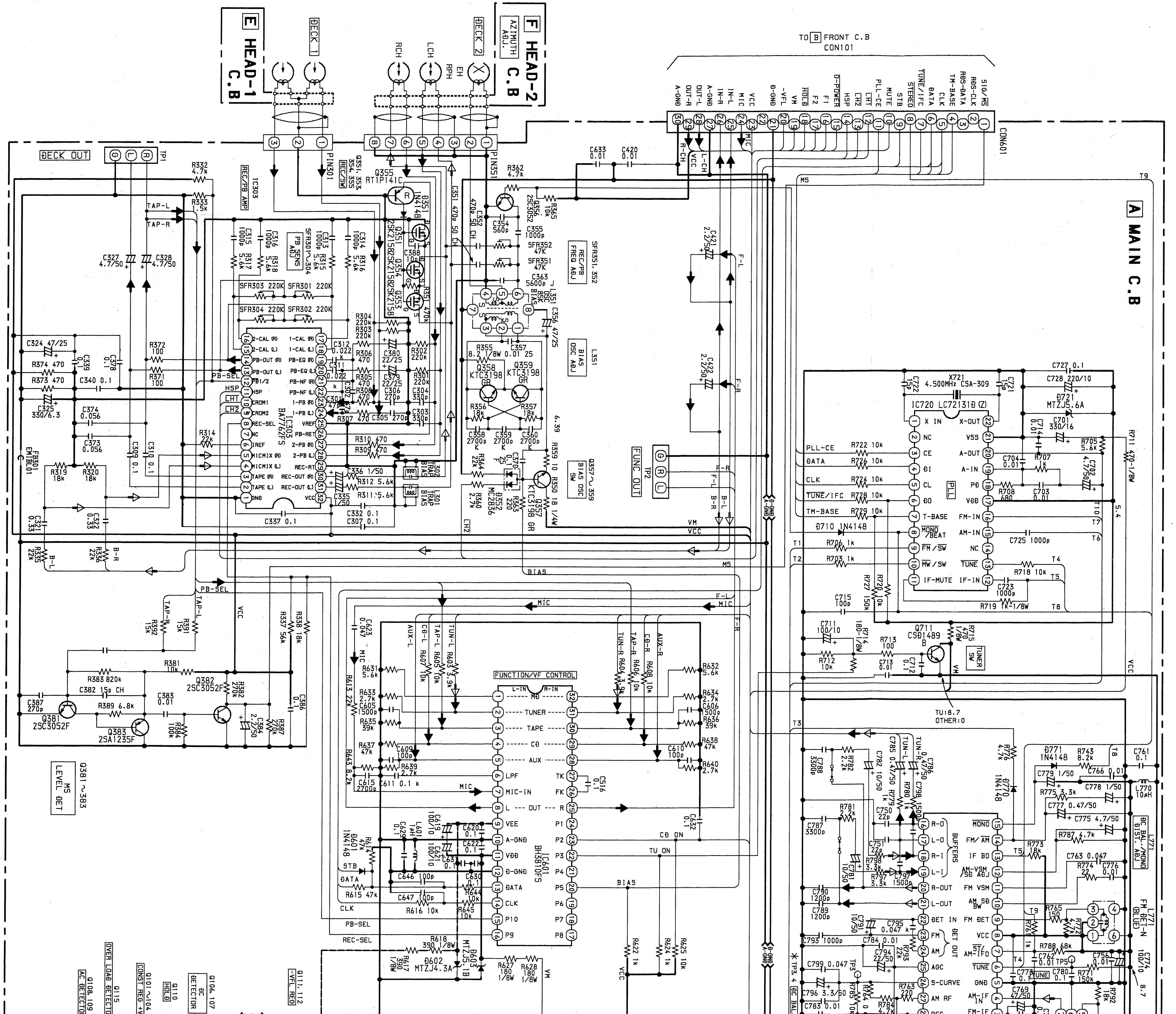
SCHEMATIC DIAGRAM – 5 (MAIN : 30EZ, 35EZ)



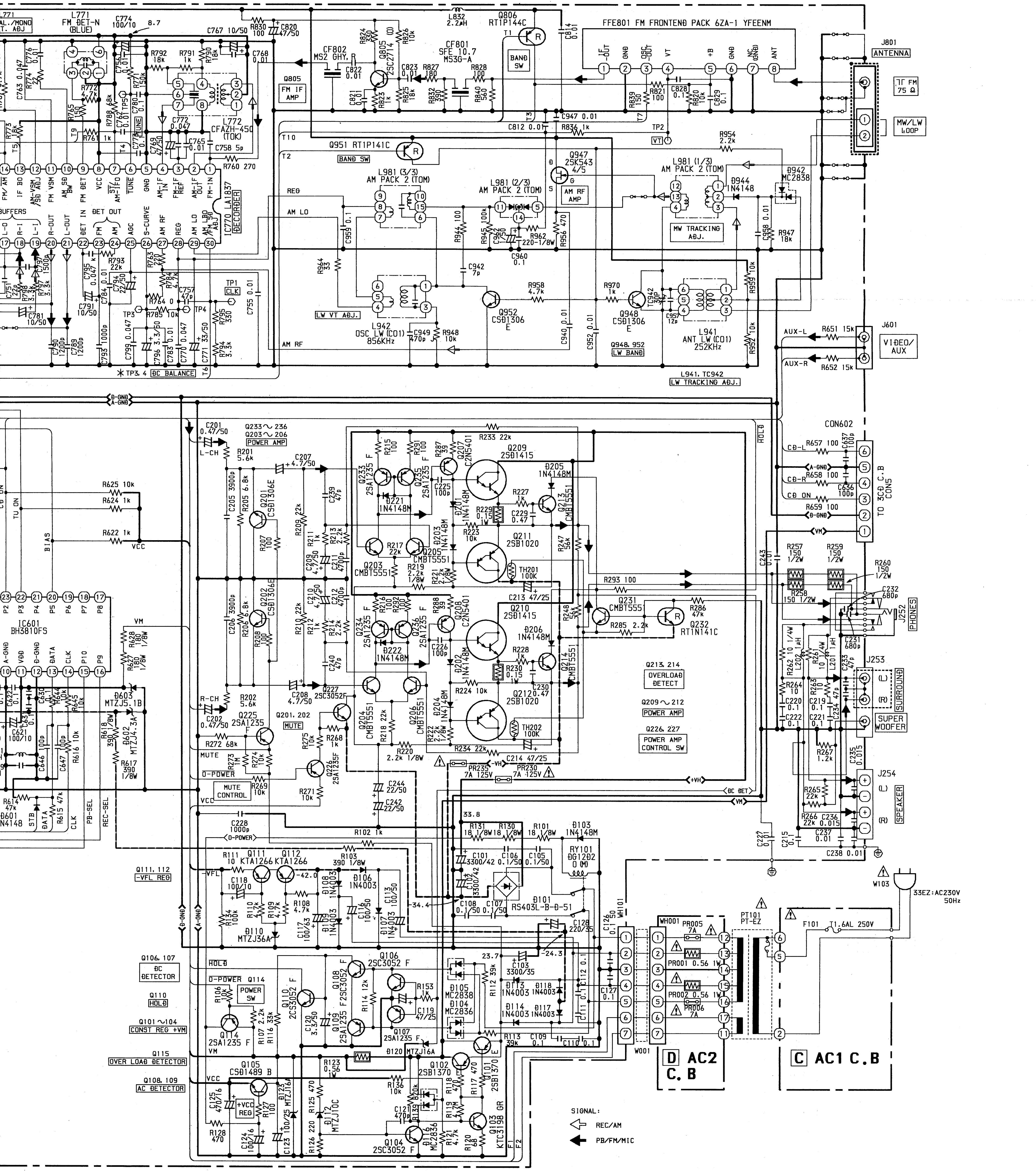
E HEAD-1 C.B
DECK 1
F HEAD-2 C.B
AZIMUTH ADJ.
DECK 2
RCH
LCH
EH
RPH
DECK OUT
TP1
PIN301
PIN351
IC303 REC/PB AMP
IC303 BA7762FS
Q351, 353, 354, 355 REC/SW
Q355 RT1P141C
D351 1N4148
PB SENS ADJ
REC/PB FREQ ADJ
BIAS OSC ADJ
BIAS OSC SW
Q351∼353:2SK2158
SFR351, 352
L351
L301 TRAP BIAS
L302 TRAP BIAS
Q358 KTC3198 GR
Q359 KTC3198 GR
Q357 KTC3198 GR
D352 MC2856
Q356 2SC3052
FB301 EMIBL01
Q357∼359
TO B FRONT C.B CON101
CON601
A MAIN C.B
SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
STEREO
TUNE/IFC
STB
MUTE
PLL-CE
CH1
CH2
HSP
D-POWER
F1
F2
FDL
VM
-VFL
D-GND
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
Q851 2SC3052F
Q852 RT1N141C
IC850 BU1920FS RDS
Q851, 852 SIGNAL/MS SW
X850 4.332M
Q850 2SC3052 F BUFFER
IC720 LC72131D (Z)
PLL
X721
D721 MTZJ5.6A
D710 1N4148
Q711 CSD1489 B
TUNER SW
TU:8.7
OTHER:0
FUNC OUT
TP2
TP8
TP9
FUNCTION/VF CONTROL
IC601 BH3810FS
L-IN
R-IN
MD
TUNER
TAPE
CD
AUX
LPF
MIC-IN
L --- OUT --- R
VEE
A-GND
VDD
D-GND
DATA
CLK
P10
P9
TK
FK
P1
P2
P3
P4
P5
P6
P7
P8
CD ON
TU ON
BIAS
STB
PB-SEL
REC-SEL
D601 1N4148
D602 MTZJ4.3A
D603 MTZJ5.1B
L601 1mH
BUFFERS
DET OUT
DC BAL./MONO DIST. ADJ
FM DET (BLUE)
L771
L770 10μH
D770 1N4148
D771 1N4148
AM SD BW
AM-VSM / SD ADJ
FM VSM
AM-IFO
S-CURVE
TP3, 4


IC601 BH3810FS
IC770 LA1837 DECORDER
FFE801 FM FRONTEND PACK 62A-1 YEENM
POWER AMP
MUTE CONTROL
POWER AMP CONTROL SW
OVERLOAD DETECT
CONST REG +VM
DC DETECTOR
HOLD
-VFL REG
DC BALANCE
DC BAL./MONO DIST. ADJ
FM IF AMP
AM RF AMP
BAND SW
MW TRACKING ADJ
LW TRACKING ADJ
D AC2 C.B
C AC1 C.B
SPEAKER
SUPER WOOFER
SURROUND
PHONES
TO 3CD C.B CON5
VIDEO/AUX
MW/LW LOOP
FM 75 Ω
ANTENNA
SIGNAL:
REC/AM
PB/FM/MIC
EZ (30/35):AC230V 50HZ

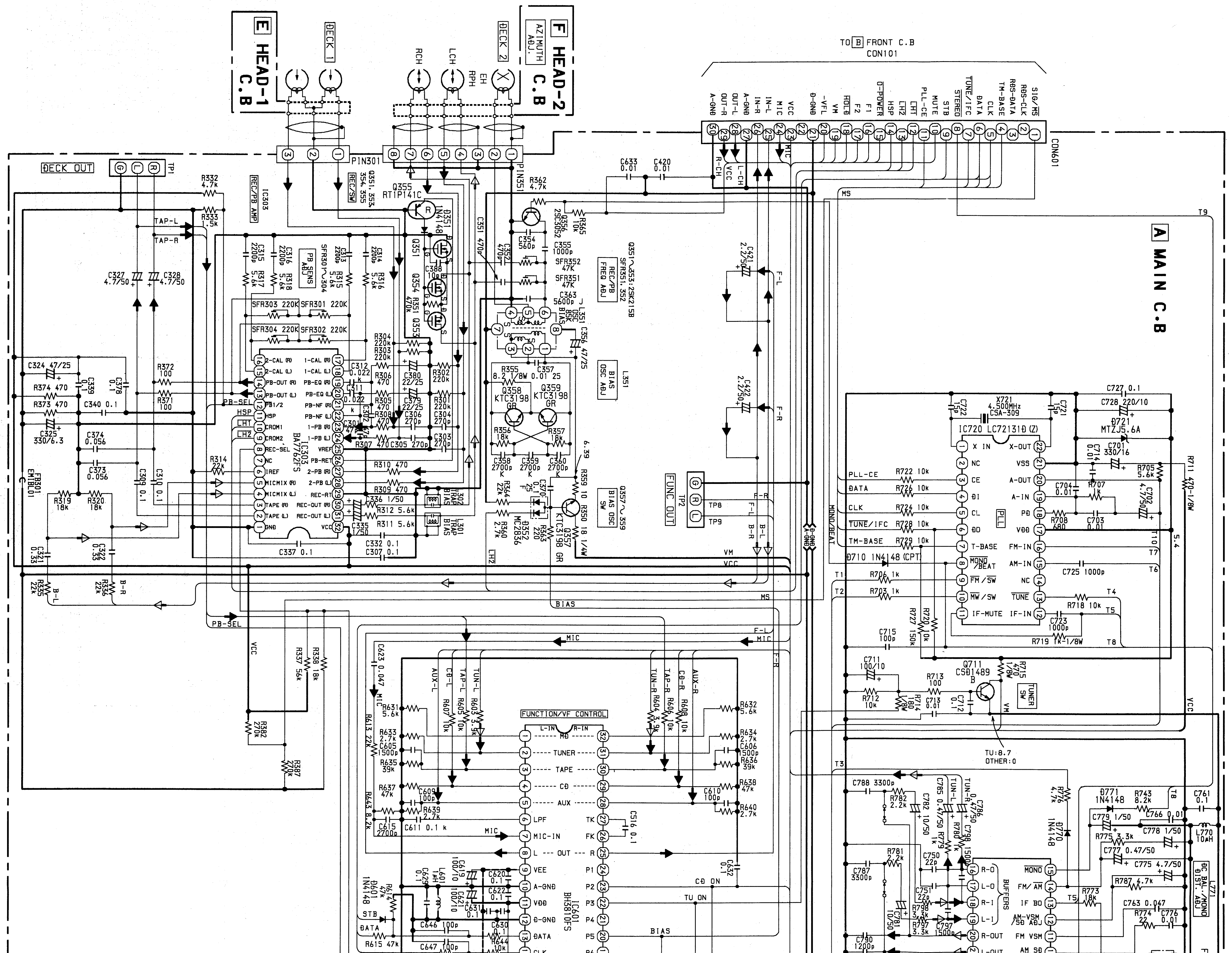
SCHEMATIC DIAGRAM – 6 (MAIN : 33EZ)

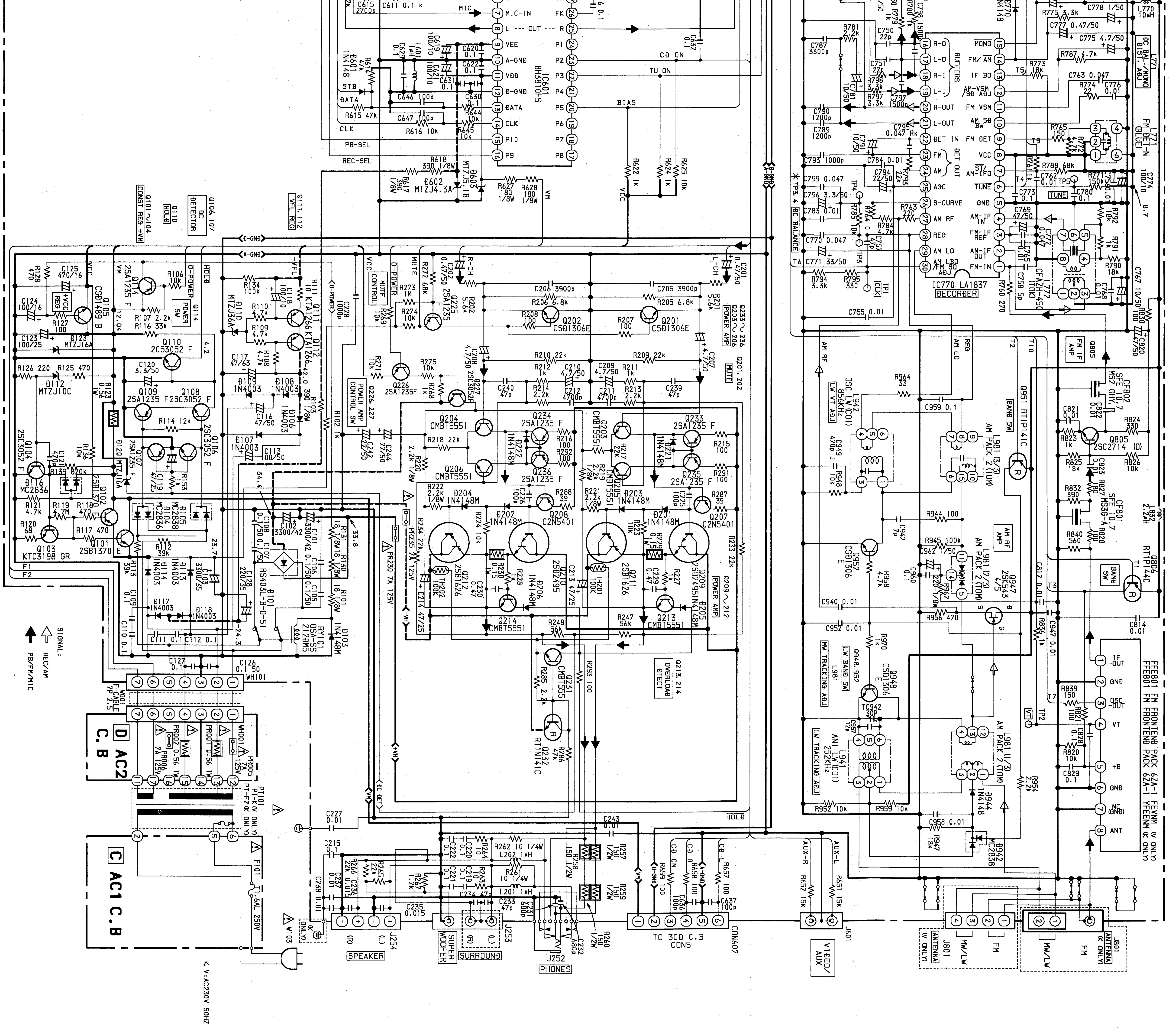


E HEAD-1 C.B
DECK 1
F HEAD-2 C.B
AZIMUTH ADJ.
DECK 2
RCH
LCH
EH
RPH
TO B FRONT C.B CON101
CON601
A MAIN C.B
DECK OUT
TP1
IC303 REC/PB AMP
Q351, 353, 354, 355 REC/SW
Q355 RT1P141C
PB SENS ADJ
SFR301~304
SFR303 220K
SFR301 220K
SFR304 220K
SFR302 220K
IC305 BA7762FS
SFR351, 352 REC/PB FREQ ADJ
L351 BIAS OSC ADJ
Q357~359 BIAS OSC SW
Q358 KTC3198
Q359 KTC3198
Q357 KTC3198 GR
TP2
FUNC OUT
PB-SEL
REC-SEL
BIAS
MIC
VCC
VM
MS
FUNCTION/VF CONTROL
IC601 BH3610FS
L-IN
R-IN
TUNER
TAPE
CD
AUX
LPF
MIC-IN
L --- OUT --- R
VEE
A-GND
VDD
D-GND
DATA
CLK
P10
P9
CD ON
TU ON
STB
Q381 2SC3052F
Q382 2SC3052F
Q383 2SA1235F
MS LEVEL DET Q381~383
IC720 LC72131D (Z)
PLL
X721 4.500MHz CSA-309
Q711 CSD1489
TUNER SW
TU:8.7
OTHER:0
BUFFERS
DET OUT
BC BAL/MONO DIST. ADJ
L771 FM DET-N (BLUE)
OVER LOAD DETECT Q115
CONST REG +V Q101~104
HOLD Q110
DC DETECTOR Q106, 107
-VFL REG Q111, 112
AC DETECT Q108, 109

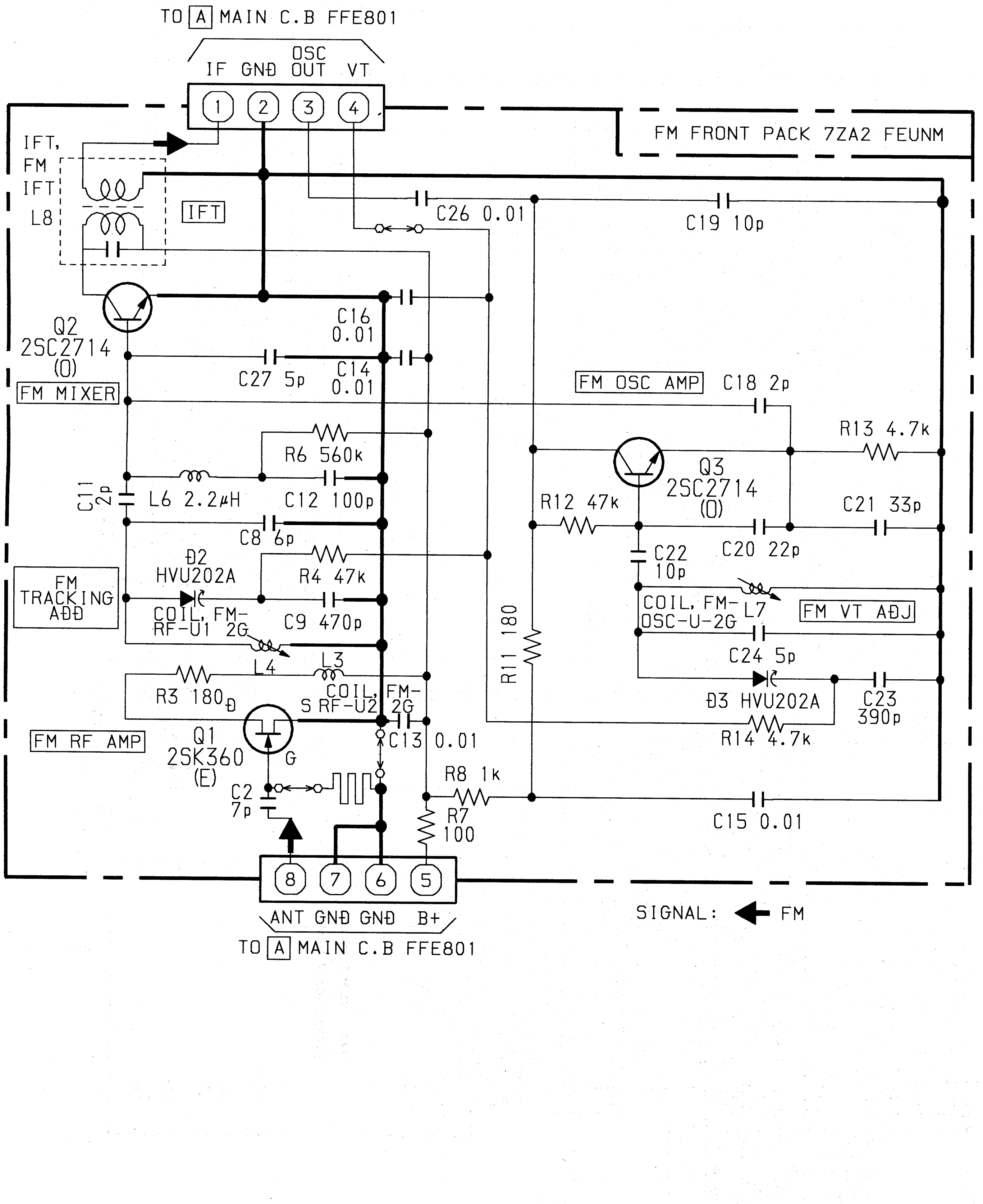

FFE801 FM FRONTEND PACK 6ZA-1 YFEENM
J801
ANTENNA
FM 75 Ω
MW/LW LOOP
IC770 LA1837
DECORDER
L771 FM DET-N (BLUE)
L772 CFAZH-450 (TOK)
CF801 SFE 10.7 MS3G-A
CF802 MS2 GHY. R
Q805 2SC2714 (O)
Q805 FM IF AMP
Q806 RT1P144C
BAND SW
Q951 RT1P141C
Q947 2SK543 4/5
AM RF AMP
L981 (1/3) AM PACK 2 (TOM)
L981 (2/3) AM PACK 2 (TOM)
L981 (3/3) AM PACK 2 (TOM)
D942 MC2838
D944 1N4148
MW TRACKING ADJ.
LW VT ADJ.
L942 OSC LW (CO1) 856KHz
L941 ANT LW (CO1) 252KHz
Q952 CSD1306 E
Q948 CSD1306 E
Q948, 952 LW BAND
L941, TC942 LW TRACKING ADJ.
*TP3, 4 DC BALANCE
J601 VIDEO/AUX
AUX-L
AUX-R
CON602
TO 3CD C.B CONS
IC601 BH3810FS
Q233～236 Q203～206 POWER AMP
Q201, 202 MUTE
Q209 2SD1415
Q210 2SD1415
Q211 2SB1020
Q212 2SB1020
Q213, 214 OVERLOAD DETECT
Q209～212 POWER AMP
Q226, 227 POWER AMP CONTROL SW
Q231 CMBT555
Q232 RT1N141C
MUTE CONTROL
J252 PHONES
J253 SURROUND
SUPER WOOFER
J254 SPEAKER
RY101 DG12D2
D101 RS403L-B-D-51
Q111, 112 -VFL REG
Q106, 107 DC DETECTOR
Q110 HOLD
Q101～104 CONST REG +VM
Q115 OVER LOAD DETECTOR
Q108, 109 AC DETECTOR
POWER SW
+VCC REG
WH101
W001
WH001
D AC2 C.B
PT101 PT-EZ
F101 T1.6AL 250V
W103
33EZ:AC230V 50Hz
C AC1 C.B
SIGNAL:
REC/AM
PB/FM/MIC

SCHEMATIC DIAGRAM – 7 (MAIN : K, V)

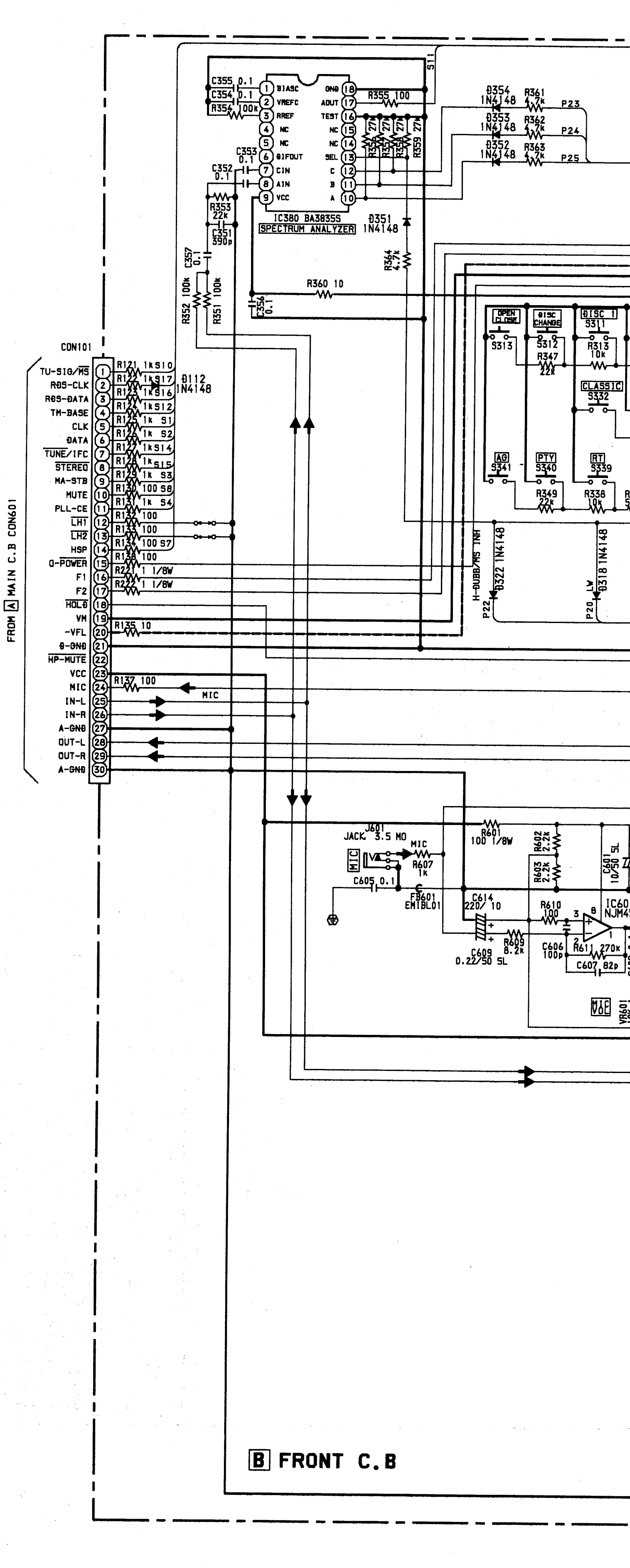

E HEAD-1 C.B
DECK 1
F HEAD-2 C.B
AZIMUTH ADJ.
DECK 2
RCH
LCH
EH
RPH
PIN301
PIN351
DECK OUT
TP1
TO B FRONT C.B
CON101
CON601
A MAIN C.B
IC303 REC/PB AMP
IC303 BA7762FS
REC/SW
Q351, 353, 354, 355
Q355 RT1P141C
D351 1N4148
PB SENS ADJ
SFR301~304
REC/PB FREQ ADJ
Q351~353: 2SK215B
SFR351, 352
L351 BIAS OSC ADJ
Q358 KTC3198 GR
Q359 KTC3198 GR
Q357~359 BIAS OSC SW
Q357 KTC3198 GR
D352 MC2836
L302 TRAP BIAS
L301 TRAP BIAS
FUNC OUT
TP2
TP8
TP9
IC720 LC72131D (Z)
X721 4.500MHz CSA-309
D721 MTZJ5.6A
PLL
D710 1N4148 (CPT)
Q711 CSD1489 B
TUNER SW
TU:8.7
OTHER:0
FUNCTION/VF CONTROL
IC601 BH3810FS
D601 1N4148
BUFFERS
D771 1N4148
D770 1N4148
L771 DC BAL./MONO DIST. ADJ
L770 10μH
PB-SEL
BIAS
MS
MIC
VCC
VM
CD ON
TU ON


IC601 BH3810FS
MIC-IN
L --- OUT --- R
VEE
A-GND
VDD
D-GND
DATA
CLK
P10
P9
STB
PB-SEL
REC-SEL
CD ON
TU ON
BIAS
VCC
VM
Q101~104 CONST REG +VM
Q110 HOLD
Q106,107 DC DETECTOR
Q111,112 -VFL REG
D-GND
A-GND
HOLD
D-POWER
POWER SW
MUTE CONTROL
POWER AMP CONTROL SW
Q226,227
Q201,202 MUTE
Q203~206 Q233~236 POWER AMP
Q209~212 POWER AMP
Q213,214 OVERLOAD DETECT
Q232 RT1N141C
RY101 DSA-SS 212DM5
RS403L-B-D-S1
PR230 7A 125V
PR235 7A 125V
L-CH
R-CH
WH101
F-CABLE 7P 2.5
D AC2 C.B
C AC1 C.B
PT101 PT-K(V ONLY) PT-EZ(K ONLY)
F101 T 6AL 250V
W103
K ONLY
K V:AC230V 50HZ
SIGNAL:
REC/AM
PB/FM/MIC
J254 SPEAKER
(R)
(L)
SUPER WOOFER
J253 SURROUND
J252 PHONES
TO 3CD C.B CON5
CON602
CD ON
CD-R
CD-L
D-GND
AUX-R
AUX-L
J601 VIDEO/AUX
IC770 LA1837 DECORDER
BUFFERS
R-O
L-O
R-I
L-I
R-OUT
L-OUT
DET IN
FM
AM
AGC
S-CURVE
AM RF
REG
AM LO
AM LO FM SD
MONO
FM/AM
IF BO
AM-VSM /SD ADJ
FM VSM
AM SD BW
FM DET
ST/ AM-IFO
TUNE
GND
AM-IF IN
FM-IF REF
AM-IF OUT
FM-IN
DC BAL./MONO ADJ
L771
L772 CF ALF-450
FM DET-N (BLUE)
TP1 CLK
TP3,4 DC BALANCE
TP5 TUNE
Q805 FM IF AMP
Q805 2SC2714
CF801 SFE 10.7 MS3D-A
CF802 SFE 10.7 MS2 GHY-R
Q951 RT1P141C BAND SW
L942 OSC LW (CD1) 856kHz LW VT ADJ
L981 (5/3) AM PACK 2 (TOM)
L981 (2/3) AM PACK 2 (TOM)
L981 (1/3) AM PACK 2 (TOM)
Q952 AM RF AMP
Q947 2SK543
Q806 RT1P144C BAND SW
Q946,952 MW TRACKING ADJ
L981 LW BAND SW
Q948 CSD1306
TC942 30P
L941 ANT LW (CD1) 252kHz LW TRACKING ADJ
MW TRACKING ADJ
FFE801 FM FRONTEND PACK 6ZA-1 FEVNM (V ONLY)
FFE801 FM FRONTEND PACK 6ZA-1 YFEENM (K ONLY)
IF-OUT
GND
OSC-OUT
VT
+B
NC (GND)
ANT
J801 MW/LW FM (V ONLY) ANTENNA
J801 ANTENNA (K ONLY) MW/LW FM
VT
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10

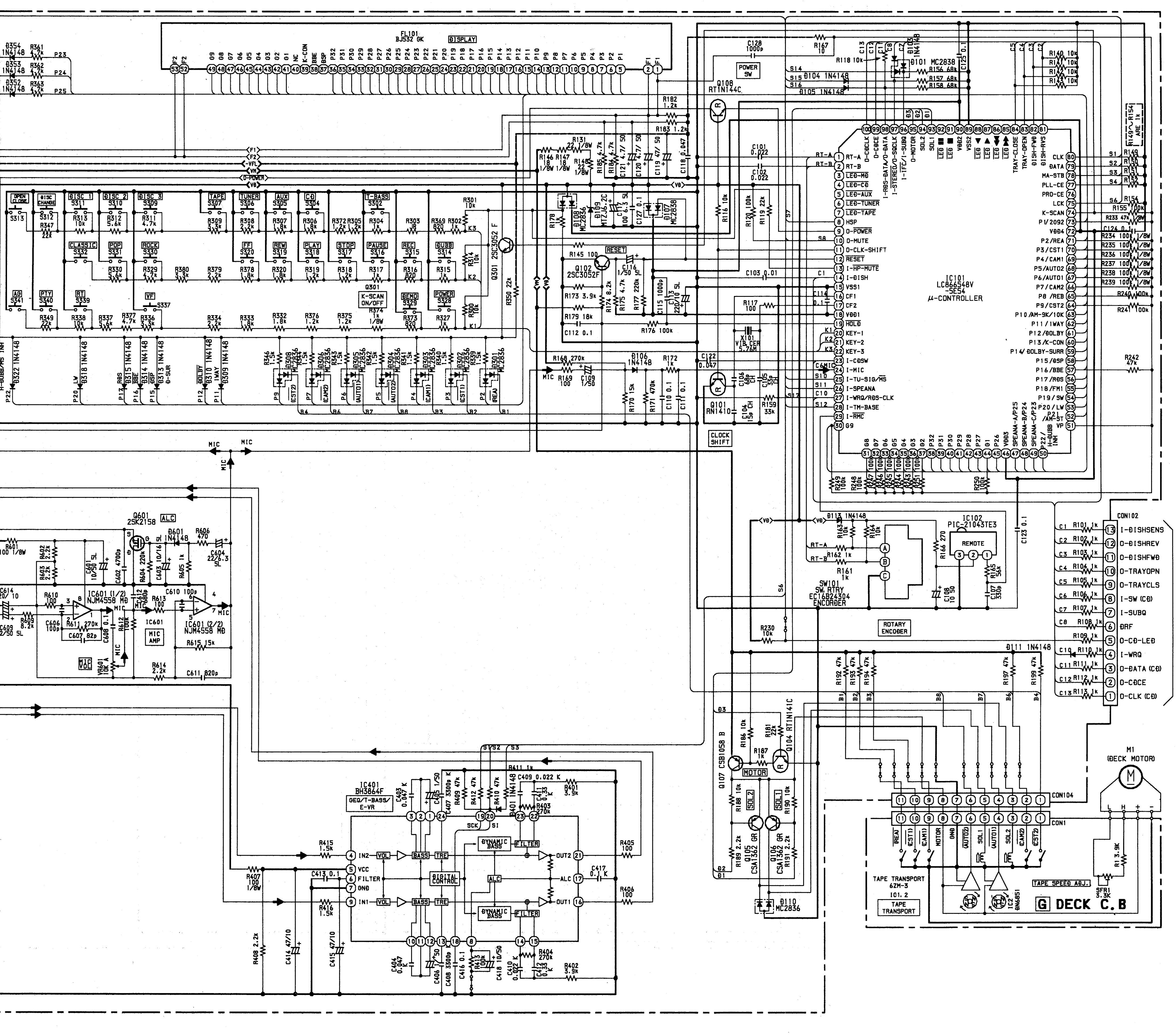
SCHEMATIC DIAGRAM – 8 (TUNER : 7ZA - 2)


TO A MAIN C.B FFE801
IF GND OSC OUT VT
1 2 3 4
FM FRONT PACK 7ZA2 FEUNM
IFT, FM IFT L8
IFT
C26 0.01
C19 10p
Q2 2SC2714 (O)
FM MIXER
C16 0.01
C27 5p
C14 0.01
FM OSC AMP
C18 2p
R13 4.7k
R6 560k
C11 2p
L6 2.2μH
C12 100p
C8 6p
Q3 2SC2714 (O)
R12 47k
C21 33p
C22 10p
C20 22p
D2 HVU202A
R4 47k
FM TRACKING ADD
COIL, FM-RF-U1 2G
C9 470p
COIL, FM-OSC-U-2G L7
FM VT ADJ
R11 180
C24 5p
L4
L3
R3 180D
COIL, FM-S RF-U2 2G
D3 HVU202A
C23 390p
R14 4.7k
FM RF AMP
Q1 2SK360 (E)
G
S
C13 0.01
C2 7p
R8 1k
R7 100
C15 0.01
8 7 6 5
ANT GND GND B+
TO A MAIN C.B FFE801
SIGNAL: FM

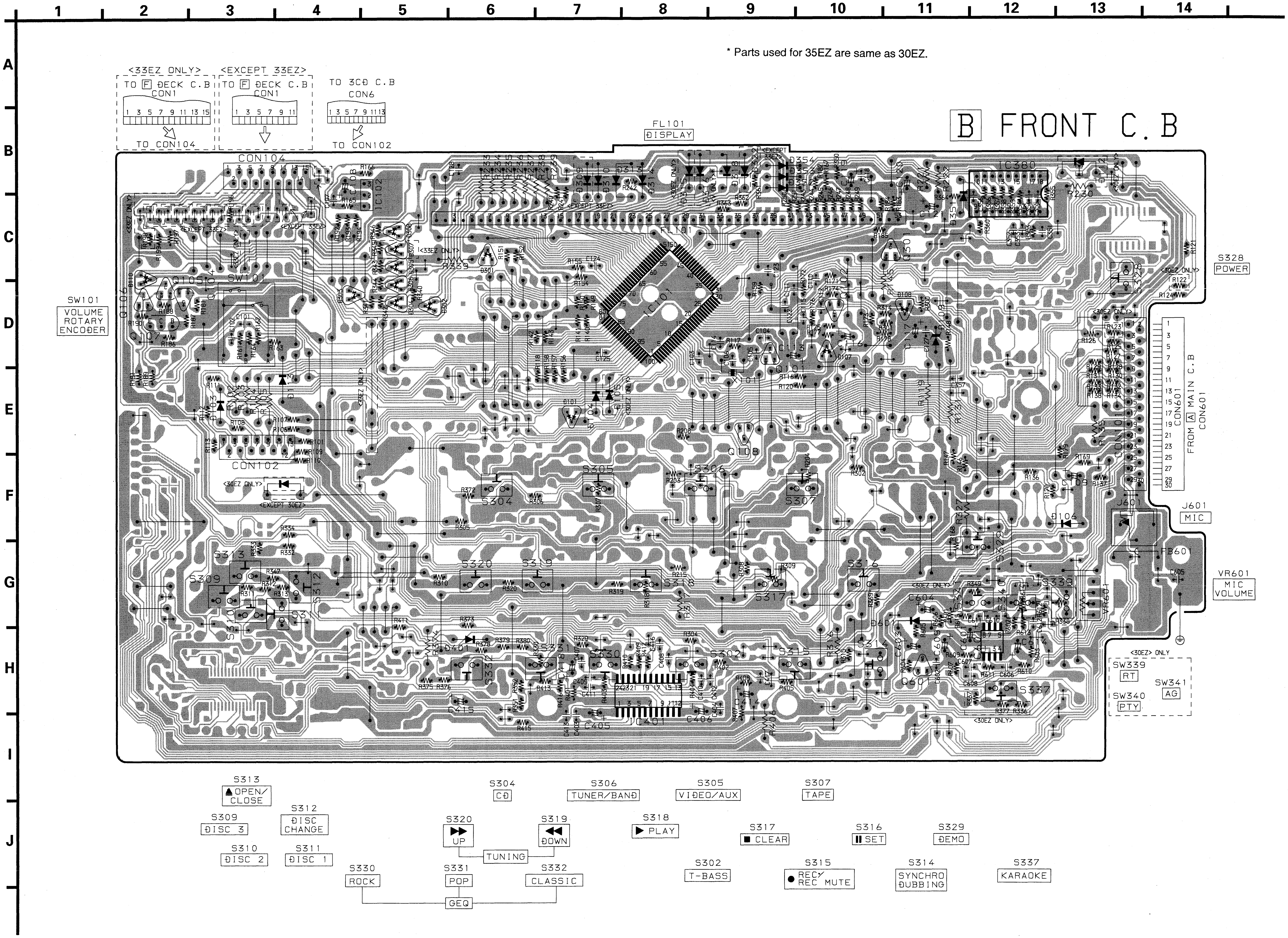
SCHEMATIC DIAGRAM – 9 (FRONT : 30EZ, 35EZ)


FROM A MAIN C.B CON601
CON101
TU-SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
O-POWER
F1
F2
HOLD
VH
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
D112 1N4148
R135 10
R137 100
MIC
IC380 BA3835S
SPECTRUM ANALYZER
D351 1N4148
R360 10
R352 100k
R351 100k
C357 0.1
C351 390p
R353 22k
C352 0.1
C353 0.1
C354 0.1
C355 0.1
R354 100k
R355 100
R359 27k
R364 4.7k
C356 0.1
S11
D354 1N4148
D353 1N4148
D352 1N4148
R361
R362 4.7k
R363 4.7k
P23
P24
P25
OPEN/CLOSE S313
DISC CHANGE S312
DISC 1 S311
R347 22k
R313 10k
CLASSIC S332
AGE S341
PTY S340
RT S339
R349 22k
R338
H-DUBB/MS INH
P22
D322 1N4148
P20
D318 1N4148
J601 JACK 3.5 MO
MIC
R607 1k
R601 100 1/8W
R602 2.2k
R603 2.2k
C605 0.1
FB601 EM1BL01
C614 220/10
R610 100
C609 0.22/50 SL
R609 8.2k
C606 100p
R611 270k
C607 82p
IC601
VR601
B FRONT C.B

30EZ, 35EZ)


FL101 BJ532 GK
DISPLAY
IC101 LC866548V -5E54 μ-CONTROLLER
IC102 PIC-21043TE3
REMOTE
SW101 SW, RTRY EC16B24304 ENCORDER
ROTARY ENCODER
CLOCK SHIFT
POWER SW
RESET
K-SCAN ON/OFF
Q301 2SC3052 F
Q601 2SK2158
ALC
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
MIC AMP
MIC VOL
IC401 BH3864F
GEQ/T-BASS/ E-VR
DYNAMIC BASS
DIGITAL CONTROL
FILTER
Q107 CSB1058 B
Q104 RT1N141C
Q105 CSA1362 GR
Q106 CSA1362 GR
MOTOR
SOL1
SOL2
CON102
TO 3CD C.B CON6
CON104
CON1
M1 (DECK MOTOR)
TAPE TRANSPORT 6ZM-3
IC1, 2
TAPE TRANSPORT
TAPE SPEED ADJ.
SFR1 3.3K
G DECK C.B
R149~R154 ARE 1k
MIC

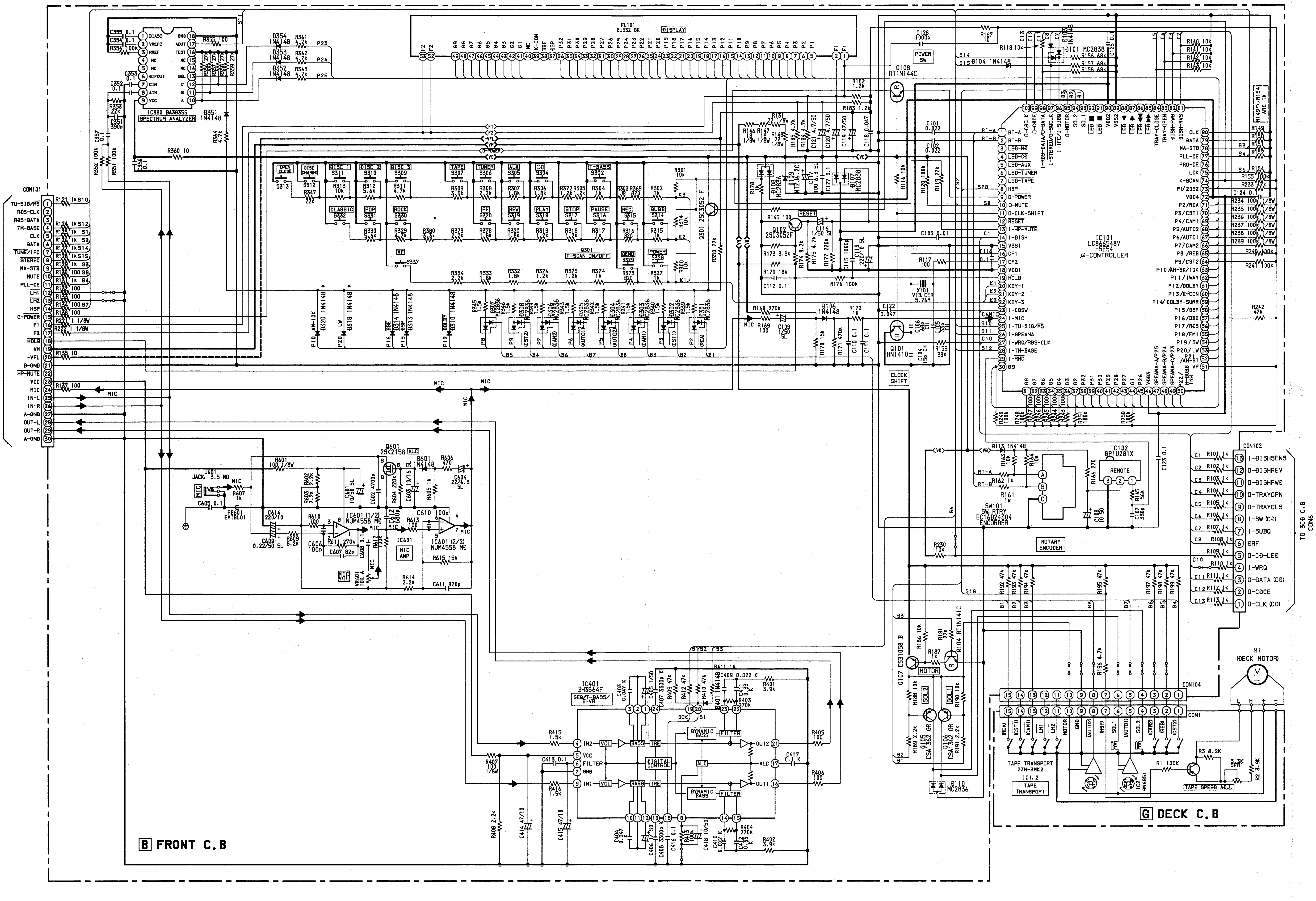
WIRING – 4 (FRONT : 30EZ, 33EZ, 35EZ, K, V)



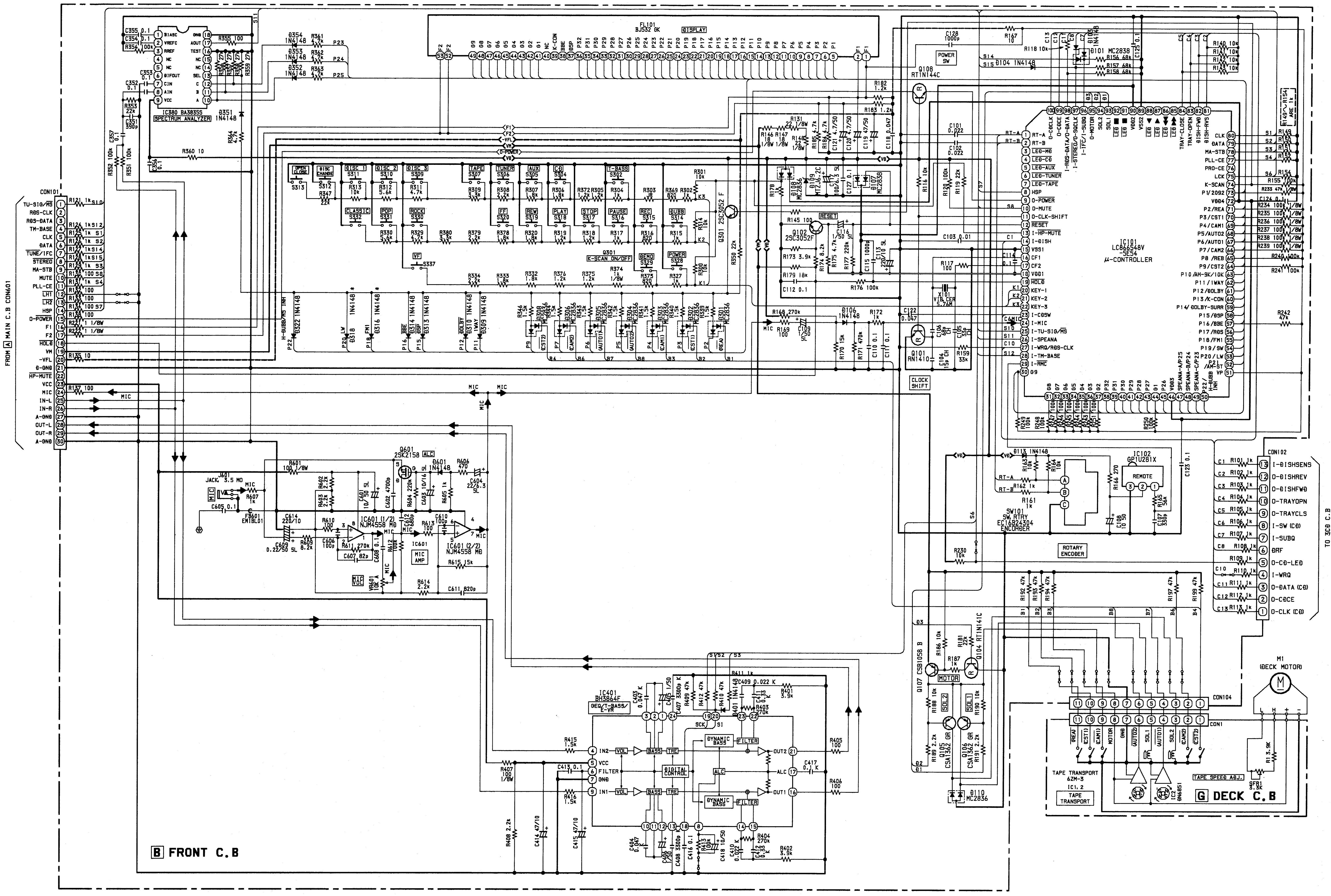
* Parts used for 35EZ are same as 30EZ.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
B FRONT C.B
<33EZ ONLY>
TO F DECK C.B
CON1
TO CON104
<EXCEPT 33EZ>
TO F DECK C.B
CON1
TO 3CD C.B
CON6
TO CON102
FL101
DISPLAY
CON104
CON102
IC101
IC102
IC380
IC401
SW101
VOLUME
ROTARY
ENCODER
S328
POWER
J601
MIC
VR601
MIC
VOLUME
FB601
CON601
FROM A MAIN C.B
CON601
<30EZ> ONLY
SW339
RT
SW341
AG
SW340
PTY
<30EZ ONLY>
<EXCEPT 30EZ>
S313
▲OPEN/
CLOSE
S312
DISC
CHANGE
S309
DISC 3
S310
DISC 2
S311
DISC 1
S304
CD
S306
TUNER/BAND
S305
VIDEO/AUX
S307
TAPE
S320
▶▶
UP
S319
◀◀
DOWN
TUNING
S318
▶ PLAY
S317
■ CLEAR
S316
II SET
S329
DEMO
S330
ROCK
S331
POP
S332
CLASSIC
GEQ
S302
T-BASS
S315
● REC/
REC MUTE
S314
SYNCHRO
DUBBING
S337
KARAOKE

SCHEMATIC DIAGRAM – 10 (FRONT : 33EZ)

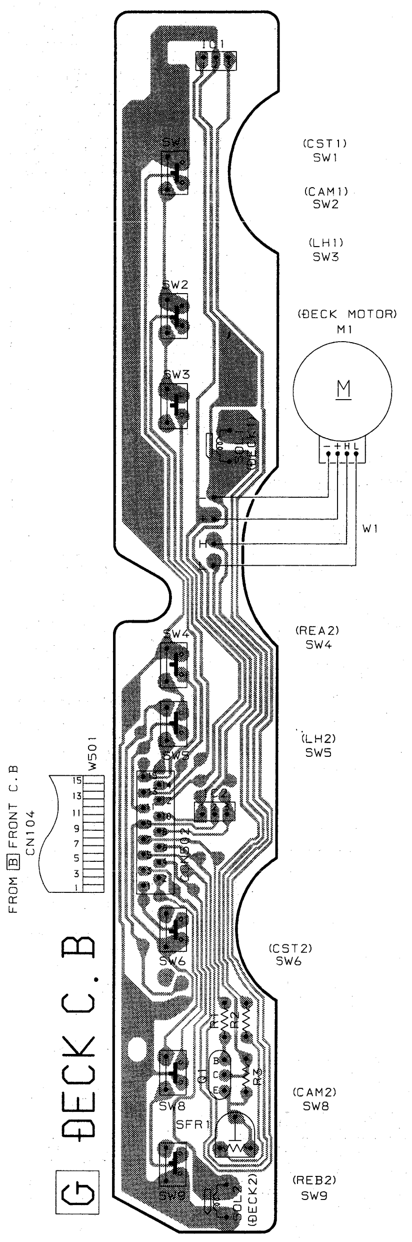

FL101 BJ532 GK
DISPLAY
IC380 BA3835S
SPECTRUM ANALYZER
CON101
FROM A MAIN C.B CON601
TU-SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
OPEN CLOSE
DISC CHANGE
DISC 1
DISC 2
DISC 3
TAPE
TUNER
AUX
CD
T-BASS
CLASSIC
POP
ROCK
FF
REW
PLAY
STOP
PAUSE
REC
DUBB
VF
DEMO
POWER
RESET
Q301 F-SCAN ON/OFF
IC101 LC866548V 5E54 µ-CONTROLLER
X101 VIB.CER 5.76M
CLOCK SHIFT
POWER SW
IC102 GP1U281X
REMOTE
SW101 SW, RTRY EC16B24304 ENCODER
ROTARY ENCODER
CON102
TO 3CD C.B CON6
I-DISHSENS
O-DISHREV
O-DISHFWD
O-TRAYOPN
O-TRAYCLS
I-SW (CD)
I-SUBQ
DRF
O-CD-LED
I-WRQ
O-DATA (CD)
O-CDCE
O-CLK (CD)
J601 JACK, 3.5 MD
MIC
Q601 2SK2158 ALC
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
IC601 MIC AMP
VR601 10K A
MIC VOL
IC401 BH3864F
GEQ/T-BASS/E-VR
VOL
BASS
TRE
DYNAMIC BASS
FILTER
DIGITAL CONTROL
ALC
IN2
VCC
FILTER
GND
IN1
OUT2
OUT1
B FRONT C.B
MOTOR
SOL2
SOL1
CON104
CON1
TAPE TRANSPORT 2ZM-3MK2
IC1, 2
TAPE TRANSPORT
TAPE SPEED ADJ.
M1 (DECK MOTOR)
G DECK C.B

SCHEMATIC DIAGRAM – 11 (FRONT : K, V)

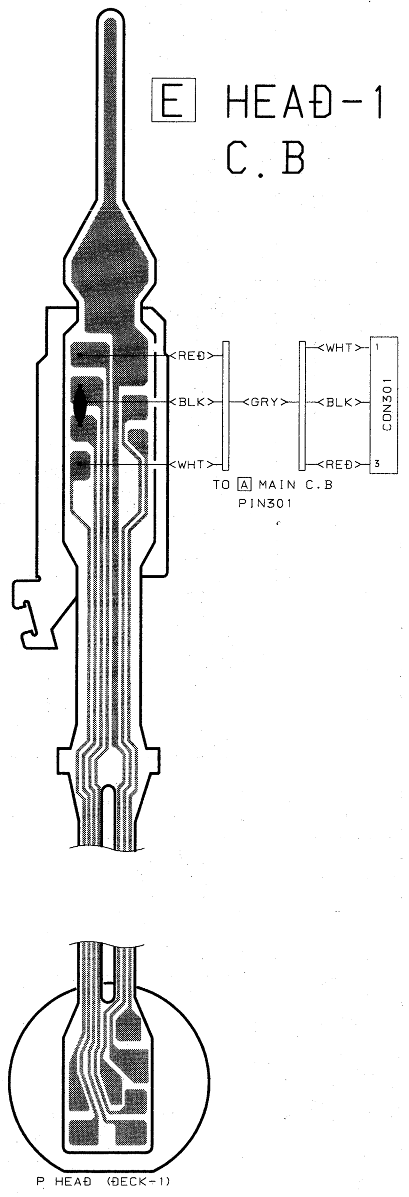


FROM A MAIN C.B CON601
CON101
TU-SIG/HS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VH
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
IC380 BA3835S
SPECTRUM ANALYZER
FL101
BJ532 GK
DISPLAY
OPEN CLOSE
DISC CHANGE
DISC 1
DISC 2
DISC 3
CLASSIC
POP
ROCK
TAPE
TUNER
AUX
CD
T-BASS
FF
REW
PLAY
STOP
PAUSE
REC
DUBB
DEMO
POWER
VF
Q301 K-SCAN ON/OFF
RESET
POWER SW
CLOCK SHIFT
IC101
LC866548V
5E54
μ-CONTROLLER
X101 VIB.CER 5.76M
IC102
GP1U281X
REMOTE
SW101
SW RTRY
EC16B24304
ENCODER
ROTARY ENCODER
CON102
I-DISHSENS
D-DISHREV
D-DISHFWD
D-TRAYOPN
D-TRAYCLS
I-SW (CD)
I-SUBQ
DRF
D-CD-LED
I-WRQ
D-DATA (CD)
D-CDCE
D-CLK (CD)
TO 3CD C.B CON6
JACK J601 3.5 MD
MIC
Q601 2SK2158
ALC
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
MIC AMP
MIC VOL
VR601 10K A
IC401
BH3864F
GEQ/T-BASS/E-VR
IN2
VCC
FILTER
GND
IN1
VOL
BASS
TRE
DYNAMIC BASS
FILTER
DIGITAL CONTROL
ALC
OUT2
OUT1
SCK
SI
MOTOR
SOL2
SOL1
Q107 CSB1058 B
Q104 RT1N141C
Q105 CSA1362 GR
Q106 CSA1362 GR
D110 MC2836
CON104
CON1
REAR
CST1
CAM1
MOTOR
GND
AUTO2
SOL1
AUTO1
SOL2
CAM2
CST2
M1
(DECK MOTOR)
TAPE TRANSPORT
6ZM-S
IC1, 2
TAPE TRANSPORT
TAPE SPEED ADJ.
SFR1 3.3K
R1 3.9K
G DECK C.B
B FRONT C.B

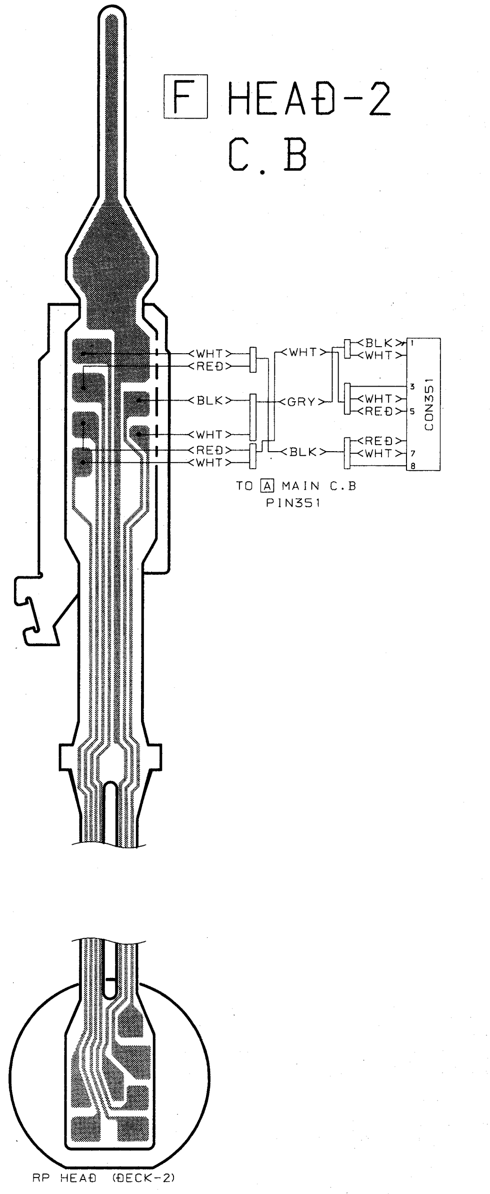
WIRING – 5 (DECK : 2ZM-3 MK2)


IC1
(CST1)
SW1
(CAM1)
SW2
(LH1)
SW3
(DECK MOTOR)
M1
M
– + H L
W1
SW1
SW2
SW3
SW4
SW5
SW6
SW8
SW9
SOL1
(DECK1)
(REA2)
SW4
(LH2)
SW5
IC2
CON502
(CST2)
SW6
R1
R2
R3
Q1
B
C
E
SFR1
(CAM2)
SW8
(REB2)
SW9
SOL2
(DECK2)
FROM B FRONT C.B
CN104
W501
15
13
11
9
7
5
3
1

G DECK C.B

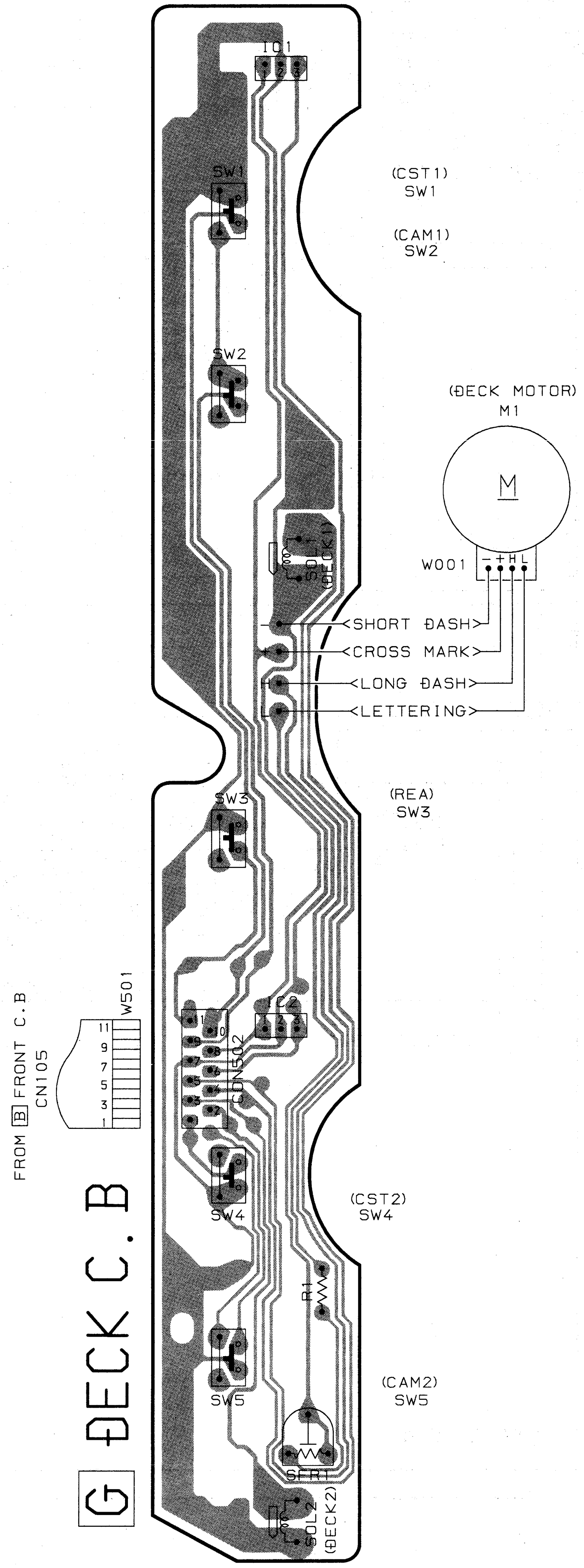

<RED>
<BLK>
<GRY>
<WHT>
<BLK>
<RED>
CON301
1
3
TO A MAIN C.B
PIN301
P HEAD (DECK-1)

E HEAD-1 C.B


<WHT>
<RED>
<BLK>
<WHT>
<RED>
<WHT>
<WHT>
<GRY>
<BLK>
<BLK>
<WHT>
<WHT>
<RED>
<RED>
<WHT>
CON351
1
3
5
7
8
TO A MAIN C.B
PIN351
RP HEAD (DECK-2)

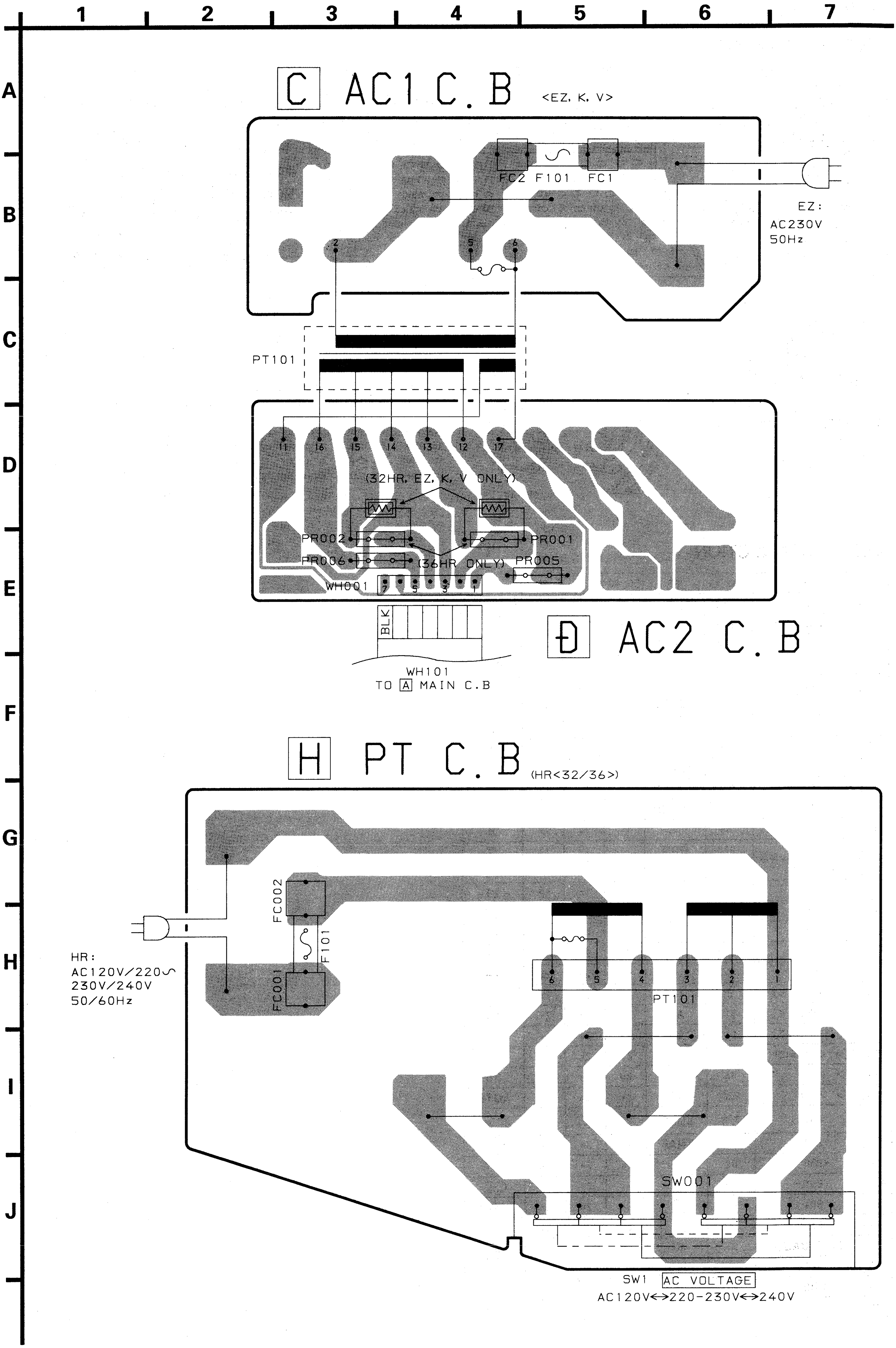
F HEAD-2 C.B

WIRING – 6 (DECK : 6ZM-3)


IC1
SW1
(CST1)
SW1
(CAM1)
SW2
SW2
(DECK MOTOR)
M1
M
W001
– + H L
SOL1
(DECK1)
<SHORT DASH>
<CROSS MARK>
<LONG DASH>
<LETTERING>
SW3
(REA)
SW3
IC2
CON502
FROM B FRONT C.B
CN105
W501
11
9
7
5
3
1
SW4
(CST2)
SW4
R1
SW5
(CAM2)
SW5
SFR1
SOL2
(DECK2)

G DECK C.B

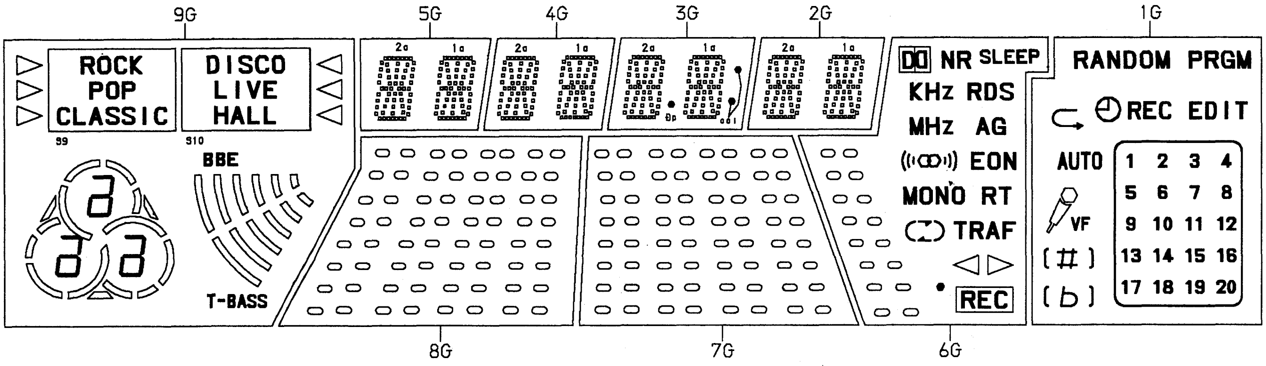
WIRING – 7 (AC AND PT)

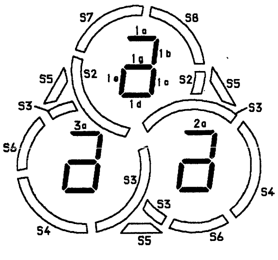

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
C AC1 C.B
<EZ. K. V>
FC2
F101
FC1
EZ:
AC230V
50Hz
2
5
6
PT101
11
16
15
14
13
12
17
(32HR, EZ, K, V ONLY)
PR002
PR001
PR006
(36HR ONLY)
PR005
WH001
7
5
3
1
BLK
WH101
TO A MAIN C.B
D AC2 C.B
H PT C.B
(HR<32/36>)
FC002
F101
FC001
HR:
AC120V/220∽
230V/240V
50/60Hz
6
5
4
3
2
1
PT101
SW001
SW1 AC VOLTAGE
AC120V↔220-230V↔240V

FL GRID ASSIGNMENT AND ANODE CONNECTION

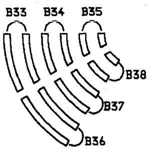
FL, BJ532GK

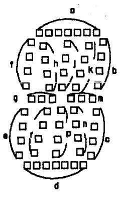
GRID ASSIGNMENT


9G
5G
4G
3G
2G
1G
ROCK
POP
CLASSIC
DISCO
LIVE
HALL
S9
S10
BBE
T-BASS
DD NR SLEEP
KHz RDS
MHz AG
((ꝏ)) EON
MONO RT
TRAF
REC
RANDOM PRGM
REC EDIT
AUTO
VF
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
[#]
[b]
8G
7G
6G

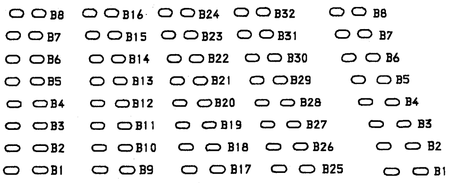

S7
S8
S2
S5
S3
S6
S4
1a
1b
1c
1d
1e
1g
2a
3a

(9G)

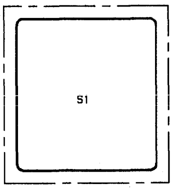

B33
B34
B35
B38
B37
B36


a
b
c
d
e
f
g
h
k
p

(5G~2G)


B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
B18
B19
B20
B21
B22
B23
B24
B25
B26
B27
B28
B29
B30
B31
B32
B1
B2
B3
B4
B5
B6
B7
B8

(8G, 7G) (6G)



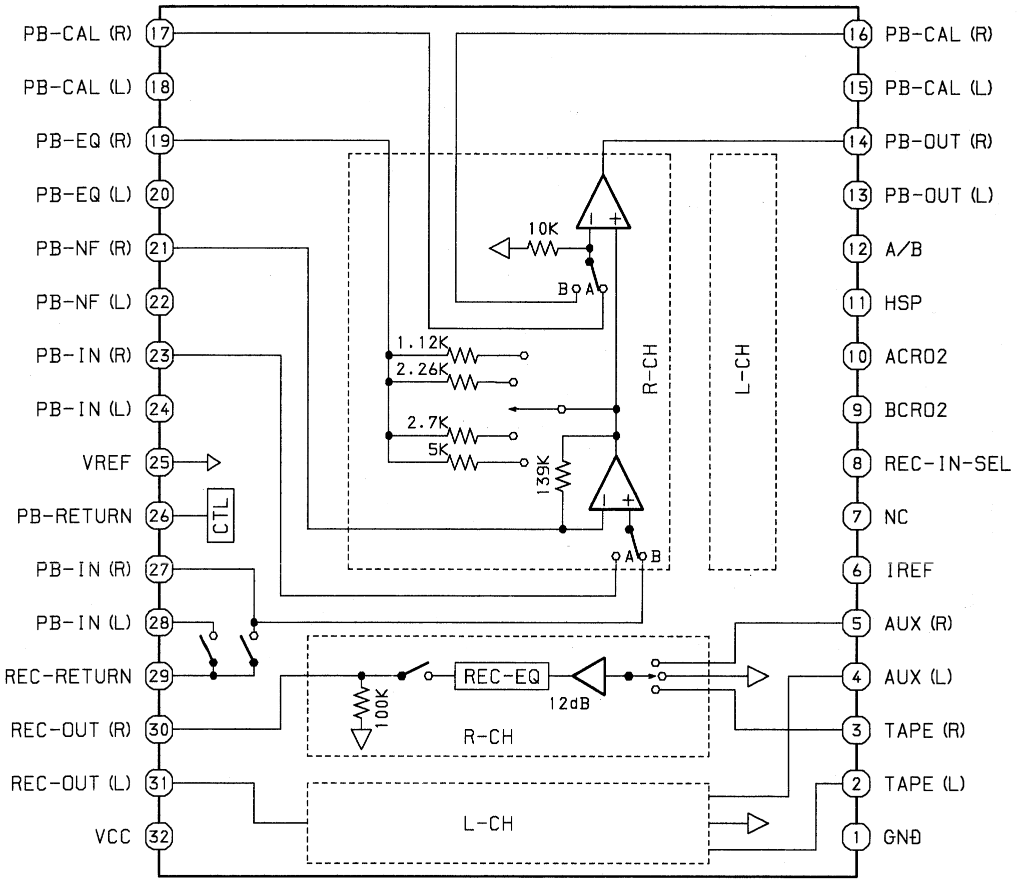
(1G)

ANODE CONNECTION

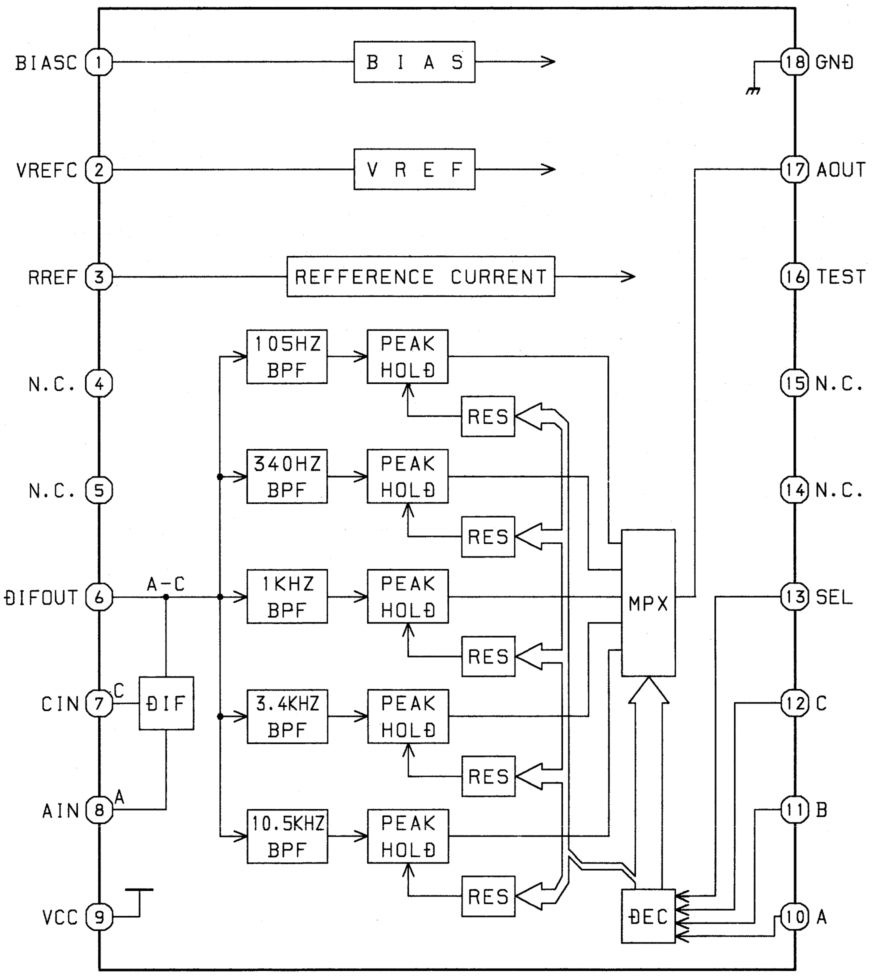
	9G	8G, 7G	6G	5G, 4G	3G	2G	1G
P1	S8	B32	▷	-	co l(DN)	-	**RANDOM**
P2	S2	B24	◁	1d	1d	1d	-
P3	1b	B16	**SLEEP**	1n	1n	1n	**PRGM**
P4	1c	B8	B8	1p	1p	1p	**EDIT**
P5	1e	B31	○	1r	1r	1r	**1**
P6	1a, 1d, 1g	B23	**REC**	1e	1e	1e	**2**
P7	2b	B15	**KHz**	1c	1c	1c	**3**
P8	2c	B7	B7	1g	1g	1g	**4**
P9	2e	B30	**MHz**	1m	1m	1m	**5**
P10	2a, 2d, 2g	B22	-	1f	1f	1f	**6**
P11	3b	B14	**DD NR**	1b	1b	1b	**7**
P12	3c	B6	B6	1k	1k	1k	**8**
P13	3e	B29	**RDS**	1j	1j	1j	**9**
P14	3a, 3d, 3g	B21	-	1h	1h	1h	**10**
P15	S3	B13	-	1a	1a	1a	**11**
P16	S5	B5	B5	-	co l(UP)	-	**12**
P17	S7	B28	-	-	Dp	-	**13**
P18	S4	B20	-	2d	2d	2d	**14**
P19	S6	B12	-	2n	2n	2n	**15**
P20	(HALL) ◁	B4	B4	2p	2p	2p	**16**
P21	(LIVE) ◁	B27	**AG**	2r	2r	2r	**17**
P22	(DISCO) ◁	B19	((ꝏ))	2e	2e	2e	**18**
P23	▷ (CLASSIC)	B11	**EON**	2c	2c	2c	**19**
P24	▷ (POP)	B3	B3	2g	2g	2g	**20**
P25	▷ (ROCK)	B26	**RT**	2m	2m	2m	**AUTO**
P26	B36	B18	**MONO**	2f	2f	2f	🎤 **VF**
P27	B37	B10	**TRAF**	2b	2b	2b	🕘
P28	B38	B2	B2	2k	2k	2k	**REC**
P29	B33	B25	)	2j	2j	2j	↪
P30	B34	B17	⇄	2h	2h	2h	[(#)]
P31	B35	B9	(	2a	2a	2a	[(b)]
P32	S9 **T-BASS**	B1	B1	-	-	-	S1
P33	S10	-	-	-	-	-	-
P34	**BBE**	-	-	-	-	-	-
P35	-	-	-	-	-	-	b #

IC BLOCK DIAGRAM

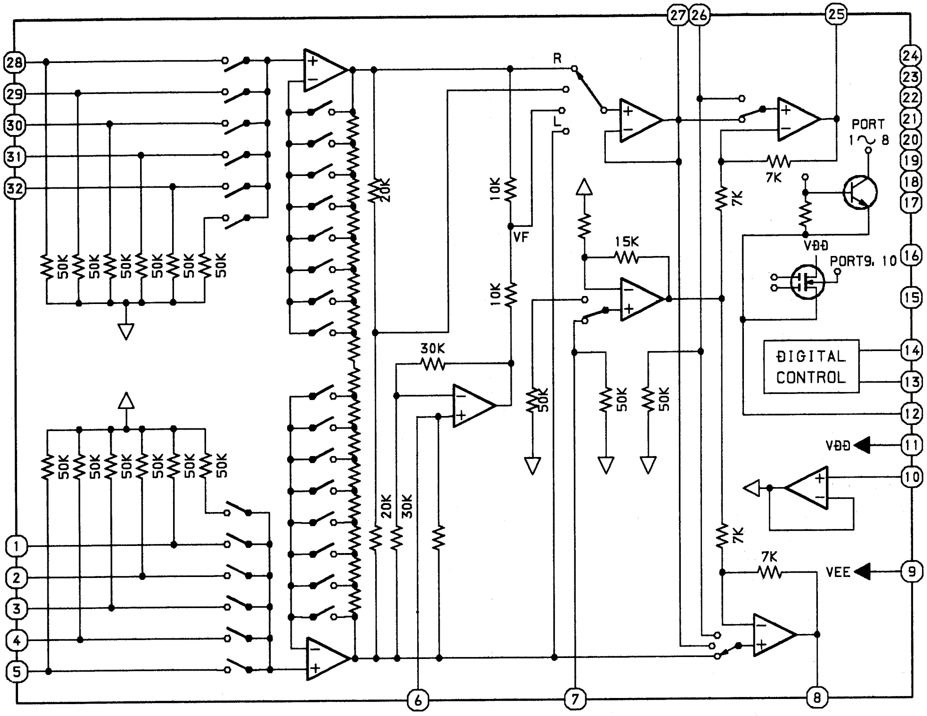
IC, BA7762FS


PB-CAL (R) 17
PB-CAL (L) 18
PB-EQ (R) 19
PB-EQ (L) 20
PB-NF (R) 21
PB-NF (L) 22
PB-IN (R) 23
PB-IN (L) 24
VREF 25
PB-RETURN 26
CTL
PB-IN (R) 27
PB-IN (L) 28
REC-RETURN 29
REC-OUT (R) 30
REC-OUT (L) 31
VCC 32
16 PB-CAL (R)
15 PB-CAL (L)
14 PB-OUT (R)
13 PB-OUT (L)
12 A/B
11 HSP
10 ACRO2
9 BCRO2
8 REC-IN-SEL
7 NC
6 IREF
5 AUX (R)
4 AUX (L)
3 TAPE (R)
2 TAPE (L)
1 GND
10K
B A
1.12K
2.26K
2.7K
5K
139K
A B
R-CH
L-CH
REC-EQ
12dB
100K
R-CH
L-CH

IC, BA3835S

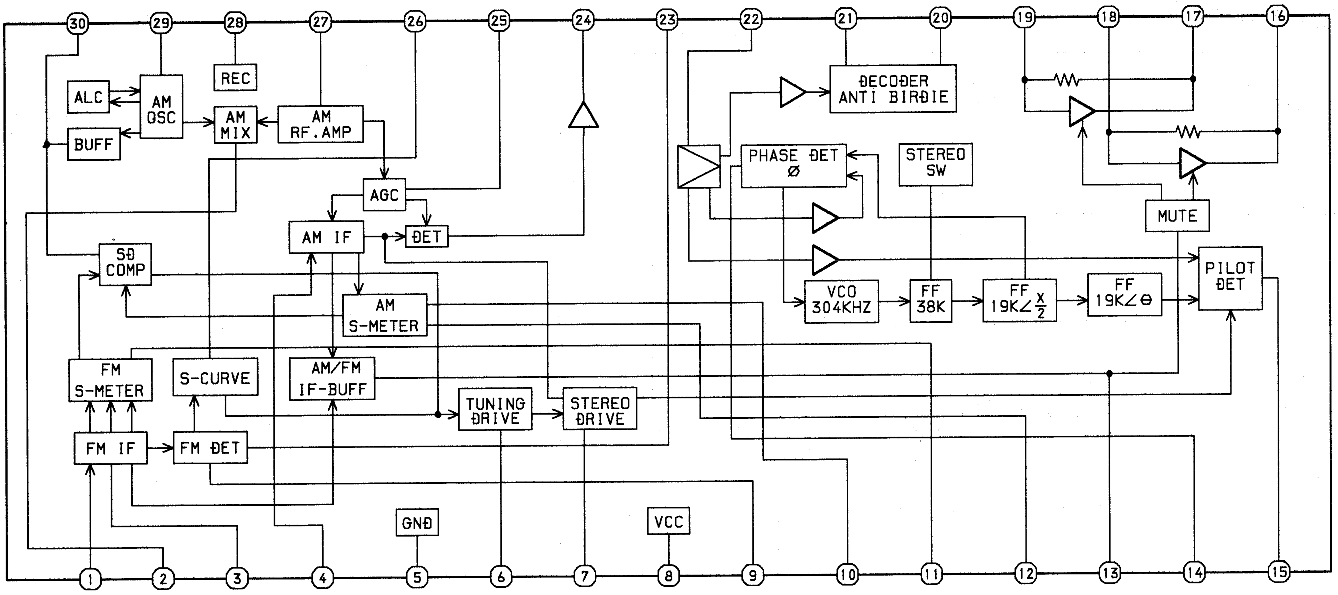

BIASC 1
VREFC 2
RREF 3
N.C. 4
N.C. 5
DIFOUT 6
CIN 7
AIN 8
VCC 9
18 GND
17 AOUT
16 TEST
15 N.C.
14 N.C.
13 SEL
12 C
11 B
10 A
B I A S
V R E F
REFFERENCE CURRENT
A-C
C
A
DIF
105HZ BPF
340HZ BPF
1KHZ BPF
3.4KHZ BPF
10.5KHZ BPF
PEAK HOLD
PEAK HOLD
PEAK HOLD
PEAK HOLD
PEAK HOLD
RES
RES
RES
RES
RES
MPX
DEC

IC, BH3810FS



R
L
VF
10K
10K
20K
30K
15K
50K
7K
PORT 1 ~ 8
VDD
PORT9, 10
DIGITAL CONTROL
VDD
VEE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

IC, LA1837



ALC
AM OSC
BUFF
REC
AM MIX
AM RF.AMP
AGC
AM IF
DET
SD COMP
AM S-METER
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
FM DET
GND
VCC
DECODER ANTI BIRDIE
PHASE DET Ø
STEREO SW
VCO 304KHZ
FF 38K
FF 19K∠X/2
FF 19K∠Θ
PILOT DET
MUTE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

IC DESCRIPTION

IC, LC866548V-5E54

Pin No.	Pin Name	I/O	Description
1	RT-A	I	Rotary encoder A input.
2	RT-B	I	Rotary encoder B input.
3	$\overline{\text{LED-MD}}$	O	"MD" LED $\overline{\text{ON}}$/OFF output.
4	$\overline{\text{LED-CD}}$	O	"CD " LED $\overline{\text{ON}}$/OFF output.
5	$\overline{\text{LED-AUX}}$	O	"AUX" LED $\overline{\text{ON}}$/OFF output.
6	$\overline{\text{LED-TUNER}}$	O	"TUNER" LED $\overline{\text{ON}}$/OFF output.
7	$\overline{\text{LED-TAPE}}$	O	"TAPE" LED $\overline{\text{ON}}$/OFF output.
8	HSP	O	Tape deck motor high speed ON/$\overline{\text{OFF}}$ output.
9	$\overline{\text{O-POWER}}$	O	System power supply $\overline{\text{ON}}$/OFF output.
10	O-MUTE	O	System mute ON/$\overline{\text{OFF}}$ output.
11	$\overline{\text{O-CLK-SHIFT}}$	O	U-COM clock shift output.
12	$\overline{\text{RESET}}$	I	Reset input.
13	$\overline{\text{I-HP-MUTE}}$	–	Not connected.
14	I-DISH	I	CD turntable photo sensor A/D converter input.
15	VSS 1	–	GND.
16	CF 1	–	5.76MHz oscillator circuit.
17	CF 2	–	
18	VDD 1	–	Power supply input.
19	$\overline{\text{HOLD}}$	I	Power failure detected input "1" to stop clock and main memory.
20	KEY-1	I	KEY input. (A/D)
21	KEY-2	I	
22	KEY-3	I	
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-MIC	I	Microphone input for AUTO VF display.
25	I-TU-SIG/$\overline{\text{MS}}$	I	Tuner signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	I-WRQ/RDS-CLK	I	CD WRQ input . TUNER RDS CLOCK input.
28	I-TM-BASE	I	REFERENCE CLOCK input for timer watch.
29	I-$\overline{\text{RMC}}$	I	System remote control signal input.
30~37	G9~G2	O	FL GRID output G2~G9.
38~43	P32~P27	O	FL SEGMENT output P27~P32.
44	G1	O	FL grid output G1.
45	P26	–	FL SEGMENT output P26.
46	VDD3	–	Power supply input.
47	SPEANA-A/P25	O	Spectrum analyzer band switching output /FL segment P25 output.
48	SPEANA-B/P24	O	Spectrum analyzer band switching output /FL segment P24 output.
49	SPEANA-C/P23	O	Spectrum analyzer band switching output /FL segment P23 output.
50	P22/H-DUBB INH	I /O	FL segment P22 output / high dubbing inhibit input to diode.
51	VP	–	Power supply input for FL display.
52	P21/AM-ST	I /O	FL segment P21 output / AM stereo input to diode.
53	P20/LW	I/O	FL segment P20 output / LW mode data input to diode.
54	P19/SW	I/O	FL segment P19 output / SW mode data input to diode.

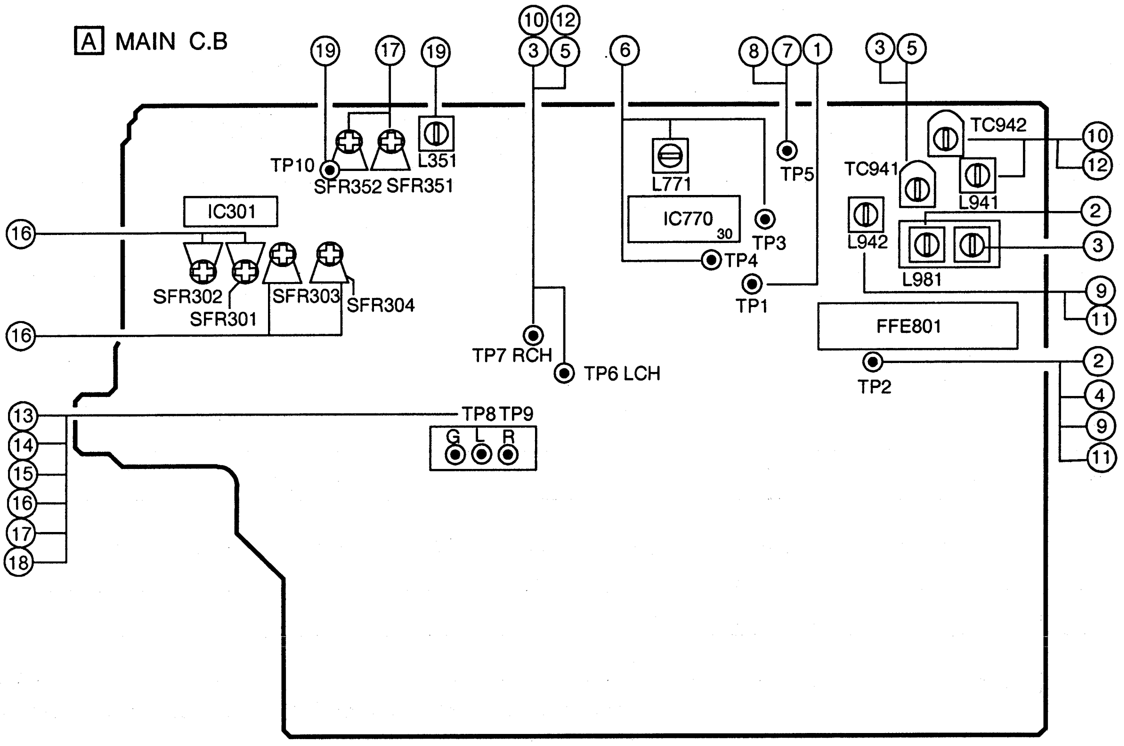
Pin No.	Pin Name	I/O	Description
55	P18/FM 1	I/O	FL segment P18 output / FM1 (OIRT) data input to diode.
56	P17/RDS	I/O	FL segment P17 output / RDS data input to diode.
57	P16/BBE	I/O	FL segment P16 output / BBE data input to diode.
58	P15/DSP	I/O	FL segment P15 output / DSP data input to diode.
59	P14/DOLBY-SURR	I/O	FL segment P14 output / DOLBY-SURR data input to diode.
60	P13/K-CON	I/O	FL segment P13 output / K-CON data input to diode.
61	P12/DOLBY	I/O	FL segment P12 output / DOLBY data input to diode.
62	P11/WAY	I/O	FL segment P11 output / DECK/WAY MECHA data input to diode.
63	P10/AM-9K/10K	I/O	FL segment P10 output / INITIAL AM 10 kHz step data input to diode.
64	P9/CST 2	I/O	FL segment P9 output / DECK2 cassette detect switch data input.
65	P8/REB	I/O	FL segment P8 output / DECK2 side-B record OK switch data input.
66	P7/CAM 2	I/O	FL segment P7 output / DECK2 CAM switch data input.
67	P6/AUTO 1	I/O	FL segment P6 output / DECK1 AUTO stop signal input.
68	P5/AUTO 2	I/O	FL segment P5 output / DECK2 AUTO stop signal input.
69	P4/CAM 1	I/O	FL segment P4 output / DECK1 CAM switch data input.
70	P3/CST 1	I/O	FL segment P3 output / DECK1 cassette detect switch data input.
71	P2/REA	I/O	FL segment P2 output / DECK2 side A record OK switch data input.
72	VDD 4	–	Power supply input.
73	P1/2092	I/O	FL segment P1 output / SHIFT resistor IC 2092 data input to diode.
74	K-SCAN	O	Switch SCAN timing output.
75	L CK	O	Latch clock output for front shift resistor.
76	PRO-CE	O	PRO LOGIC IC chip enable output.
77	PLL-CE	O	PLL IC chip enable output.
78	MA-STB	O	Latch strobe output for MAIN PWB.
79	DATA	O	DATA output for MAIN, FORNT, PROLOGIC PWB.
80	CLK	O	CLOCK output for MAIN,FORNT, PROLOGIC PWB.
81	DISH-RVS	O	CD turntable reverse rotation output.
82	DISH-FWD	O	CD turntable forward rotation output.
83	TRAY-OPEN	O	CD TRAY OPEN data output.
84	TRAY-CLOSE	O	CD TRAY CLOSE data output.
85	$\overline{\text{LED}}$ ▶▶	O	▶▶ LED $\overline{\text{ON}}$/OFF output.
86	$\overline{\text{LED}}$ ◀◀	O	◀◀ LED $\overline{\text{ON}}$/OFF output.
87	$\overline{\text{LED}}$ ▶	O	▶ LED $\overline{\text{ON}}$/OFF output.
88	$\overline{\text{LED}}$ ◀	O	◀ LED $\overline{\text{ON}}$/OFF output.
89	VSS 2	–	GND.
90	VDD 2	–	Power supply input.
91	$\overline{\text{LED}}$ ■	O	■ LED $\overline{\text{ON}}$/OFF output.
92	$\overline{\text{LED}}$ ❚❚	O	❚❚ LED $\overline{\text{ON}}$/OFF output.
93	$\overline{\text{SOL 1}}$	O	DECK 1 Solenoid output.
94	$\overline{\text{SOL 2}}$	O	DECK 2 Solenoid output.
95	O-MOTOR	O	DECK MOTOR ON/$\overline{\text{OFF}}$ output.
96	I-IFC/I-SUB Q	I	Tune IF count serial data input /CD SUB Q data input.

Pin No.	Pin Name	I/O	Description
97	I-STEREO/O-SQCLK	I/O	Tuner stereo detected input/CD SQ CLOCK output.
98	I-RDS-DATA/O-DATA	I/O	RDS data input/CD data output.
99	O-CD CE	O	CD CE output.
100	O-CD CLK	O	CD CLOCK output.

IC, LC72131

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>XIN</td><td rowspan="2">I/O</td><td rowspan="2">A crystal oscillator (7.2MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>XOUT</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>To enable the IC. Active "H".</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>Digital data input from CPU (LC866548V-5E15) when relevant key is operated. Active "H".</td></tr>
<tr><td>5</td><td>CLK</td><td>I</td><td>To clock in the data DI.</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>Digital data output to CPU (LC866548V-5E15).</td></tr>
<tr><td>7</td><td>TM-BASE</td><td>O</td><td>Outputs a reference clock signal (8Hz) for the clock.</td></tr>
<tr><td>8</td><td>$\overline{\text{MONO}}$ / BEAT</td><td>O</td><td>Outputs "H" when MONO / BEAT is switched.</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / AM</td><td>O</td><td>Output "L" or "H" as follows:
<table>
<tr><td colspan="2">2 BAND</td><td colspan="3">3 BAND</td><td colspan="3">3 BAND</td></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$</td><td>O</td><td>Outputs "L" or "H" as follows:
<table>
<tr><td colspan="2">2 BAND</td><td colspan="3">3 BAND</td><td colspan="3">3 BAND</td></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IF-MUTE</td><td>O</td><td>To control internal counter.</td></tr>
<tr><td>12</td><td>IFIN</td><td>I</td><td>General purpose counter input.</td></tr>
<tr><td>13</td><td>TUNE</td><td>I</td><td>Receives "L" when station is tuned.</td></tr>
<tr><td>14</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>15</td><td>A MIN</td><td>I</td><td>Receives the AM local oscillator frequency signal.</td></tr>
<tr><td>16</td><td>F MIN</td><td>I</td><td>Receives the FM local oscillator frequency signal.</td></tr>
<tr><td>17</td><td>VDD</td><td>–</td><td>Supply power to IC (+5V).</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL charge pump output.</td></tr>
<tr><td>19</td><td>AIN</td><td>I</td><td rowspan="2">The MOS transistor for PLL active low pass filter.</td></tr>
<tr><td>20</td><td>AOUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>–</td><td>Ground.</td></tr>
</table>

ADJUSTMENT <TUNER / DECK>


A MAIN C.B
⑲
⑰
⑲
⑩⑫
③⑤
⑥
⑧⑦①
③⑤
TP10
SFR352 SFR351
L351
L771
IC770
30
TP5
TP3
TP4
TP1
TC942
TC941
L941
L942
L981
FFE801
TP2
IC301
SFR302
SFR301
SFR303
SFR304
TP7 RCH
TP6 LCH
TP8 TP9
G L R
⑯
⑯
⑬
⑭
⑮
⑯
⑰
⑱
⑩
⑫
②
③
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②
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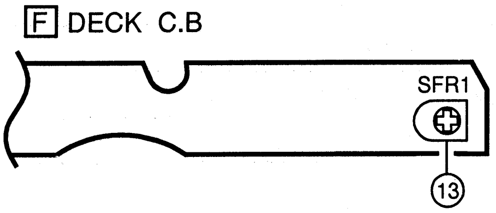
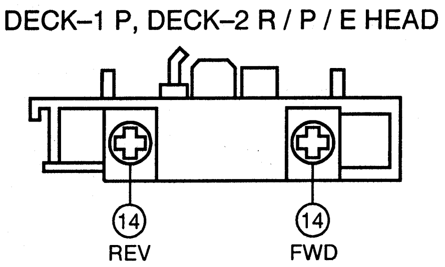
⑪


F DECK C.B
SFR1
⑬


DECK–1 P, DECK–2 R / P / E HEAD
⑭
REV
⑭
FWD

-< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP1
   Method : Set to MW 1710kHz and check that the test point is 2160kHz ± 45Hz.<HR>
   Set to MW 1602kHz and check that the test point is 2052kHz ±45Hz.<EZ,K,V>

2. MW VT Adjustment
   Settings : • Test point : TP2 (VT)
   Method : Set to MW 1710kHz and adjust L981 so that the test point is 8.5V ± 0.05V. <HR>
   Then, set to MW 530kHz and check that the test point is more than 0.3V.<HR>
   <EZ,K,V>
   Set to MW 531kHz and adjust L981 so that the test point is 1.5V ± 0.05V.
   Then, set to MW 1602kHz and check that the test point is less than 8.5V.

3. MW Tracking Adjustment<HR>
   Settings : • Test point : TP6, TP7
   • Adjustment location :
   L981 .... 600kHz
   TC941 .... 1400kHz
   Method : Set up TC941 to center before adjustment. The level at 600kHz is adjusted to MAX by L981. Then, the level at 1400kHz is adjusted to MAX by TC941.

3. MW Tracking Adjustment<EZ,K,V>
   Settings : • Test point : TP6, TP7
   • Adjustment location :
   L981 .... 999kHz

4. FM VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.5V. Set to FM 87.5MHz and check that the test point is more than 1.5V.<EXCEPT V>
   <V>
   Set to FM 108.0MHz and check that the test point is less than 9.5V. Set to FM 65MHz and check that the test point is more than 0.8V.

5. FM Tracking Check
   Settings : • Test point : TP6, TP7
   Method : • Set to FM 98.0MHz and check that the test point is 2 ± 6dB<HR,V>, 6 ± 6dB<EZ,K>.
   Set to FM 70.0MHz and check that the test point is 6 ± 5dB<V>

6. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4
   • Adjustment location : L771
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3%

7. Auto Stop Level Check
Settings : • Test point : TP5
• Input level : adjustable
Method : Set to FM 98.0 MHz and check that the voltage low about 0.1V. After that voltage high about 7.0V out by 2dB down.

8. Auto Stop Level Check
FM
Settings : • Test point : TP5
• Input level : adjustable
Method : Set to FM 98.0MHz and check that the test point is 25dB ± 10dB.

MW
Settings : • Test point : TP5
• Input level : adjustable
Method : Set to MW 999kHz and check that the test point is 35 ~ 60dB.

SW<HR>
Settings : • Test point : TP5
• Input level : adjustable
Method : Set to SW 12MHz and check that the test point is less than 60dB.

9. SW VT Adjustment <HR>
Settings : • Test point : TP2 (VT)
Method : Set to SW 17.9MHz and adjust L942 so that the test point is 7.0V ± 0.05V.

10. SW Tracking Adjustment<HR>
Settings : • Test point : TP6, TP7
• Adjustment location :
L941 .... 5.9MHz
TC942 .... 17.9MHz
Method : Set up TC941 to center before adjustment. The level at 5.9MHz is adjusted to MAX by L941. Then, the level at 17.9MHz is adjusted to MAX by TC942.

11. LW VT Adjustment <EZ,K,V>
Settings : • Test point : TP2 (VT)
Method : Set to LW 144kHz and adjust L942 so that the test point is 1.3V ± 0.05V.

12. LW Tracking Adjustment<EZ,K,V>
Settings : • Test point : TP6, TP7
• Adjustment location :
L941 .... 144kHz
TC942 .... 290kHz
Method : Set up TC941 to center before adjustment. The level at 144MHz is adjusted to MAX by L941. Then, the level at 290MHz is adjusted to MAX by TC942.

< DECK SECTION >

13. Tape Speed Adjustment
Settings : • Test tape : TTA–100
• Test point : TP8, TP9
• Adjustment location : SFR1
Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz.

14. Head Azimuth Adjustment
Settings : • Test tape : TTA–410
• Test point : TP8, TP9
• Adjustment location : Head azimuth adjustment screw
Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

15. PB Frequency Response Check (DECK 1, DECK 2)
Settings : • Test tape : TTA–410
• Test point : TP8, TP9
Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 2dB.

16. PB Sensitivity Adjustment (DECK 1, DECK 2)
Settings : • Test tape : TTA–200
• Test point : TP8, TP9
• Adjustment location :
SFR301 (DECK 1, Lch)
SFR302 (DECK 1, Rch)
SFR303 (DECK 2, Lch)
SFR304 (DECK 2, Rch)
Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 330mV.

17. REC/PB Frequency Response Adjustment
Settings : • Test tape : TTA–602
• Test point : TP8, TP9
• Input signal : 1kHz / 10kHz (LINE IN)
• Adjustment location : SFR351 (Lch)
SFR352 (Rch)
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 210mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

18. REC/PB Sensitivity Check
Settings : • Test tape : TTA–602
• Test point : TP8, TP9
Method : Apply a 1kHz signal and REC mode. and check that the output level at the TP8, TP9 is 21mV. Record and play back the 1kHz signals so that the output level is 17mV ± 3dB.

19. Bias OSC Frequency Adjustment
Settings : • Test tape : TTA–601
• Test point : TP10
• Adjustment location : L351
Method : Set to the REC mode. Adjust L351 so that the frequency counter of the test point is 85kHz ± 1kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity : (THD 3%)	HR : 2dB ± 6dB [at 87.5 / 98.0 / 108.0MHz] EZ, K : 6dB ± 6dB [at 87.5 / 98.0 / 108.0MHz] V : 6dB ± 6dB [at 65 / 70 / 74MHz]
S/N 50dB Quieting sensitivity :	HR : 30dB ± 6dB [at 87.5 / 98.0 / 108.0MHz] EZ, K : 34dB ± 6dB [at 87.5 / 98.0 / 108.0MHz] V : 33dB ± 6dB [at 65 / 70 / 74MHz]
Signal to noise ratio :	More than 65dB [at 98.0MHz]<MONO> More than 64dB [at 98.0MHz]<STEREO>
Distortion :	1.3% [at 98.0MHz]<MONO> Less than 2.0% [at 98.0MHz]<STEREO>
Stereo separation :	More than 22dB [at 98.0MHz]
Intermediate frequency :	10.7MHz

<LW SECTION>[EZ,K,V]

Sensitivity : (S/N 20 dB)	Less than 71dB [at 144kHz] Less than 68dB [at 198 / 290kHz]
Distortion :	Less than 1.5% [at 1000kHz]
Intermediate frequency :	450kHz

<MW SECTION>

Sensitivity : (S/N 20 dB)	55dB ± 5dB [at 600kHz] 53dB ± 5dB [at 1000 / 1400kHz]
Distortion :	Less than 1.5% [at 1000kHz]
Intermediate frequency :	450kHz

<SW SECTION>[HR]

Sensitivity : (S/N 20 dB)	38dB ± 5dB [at 5.9MHz] 33dB ± 5dB [at 12.0MHz] 30dB ± 8dB [at 17.9MHz]
Distortion :	Less than 1.5% [at 1000kHz]
Intermediate frequency :	450kHz

<DECK SECTION>

<2ZM-3MK2>

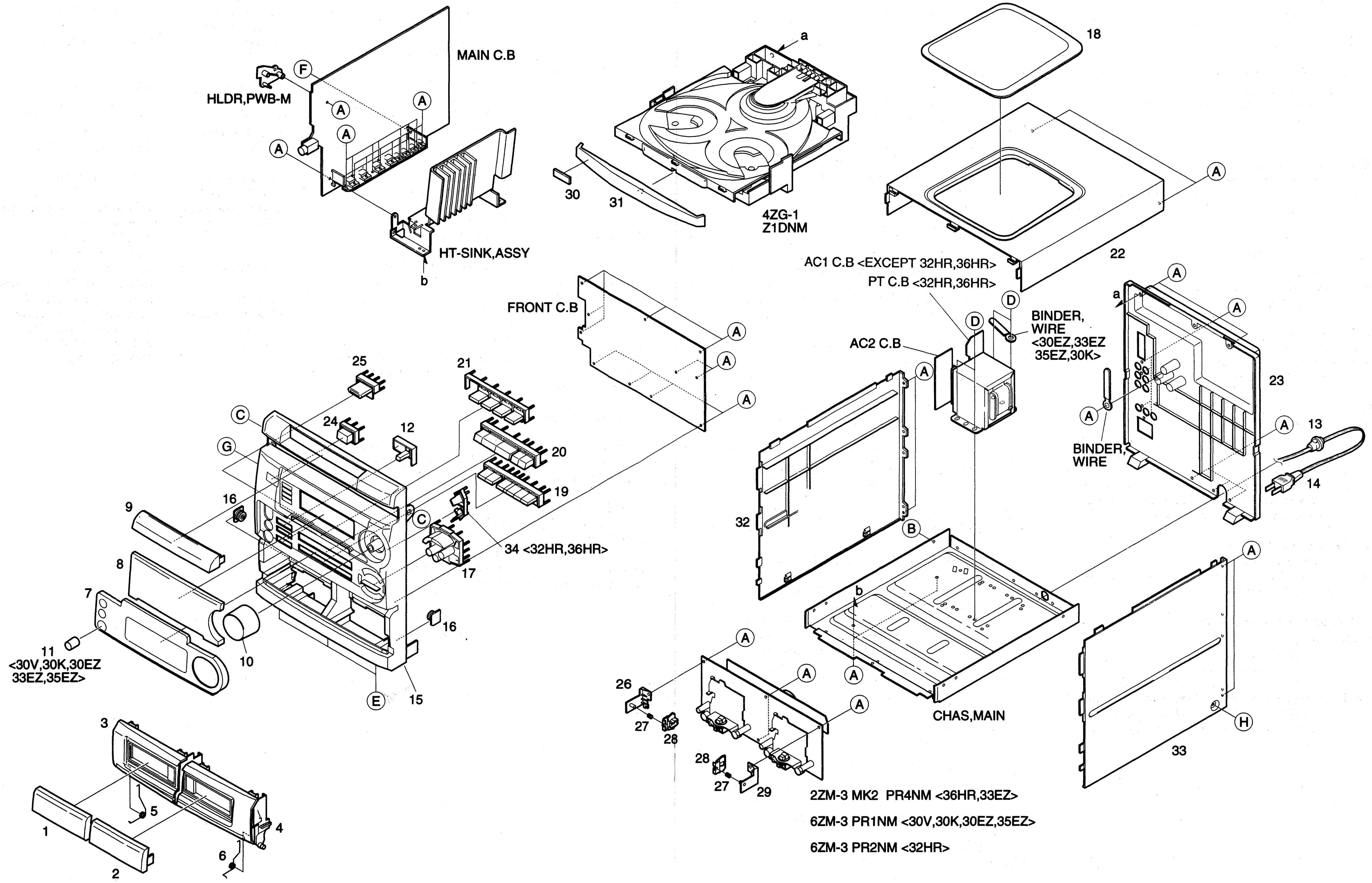
Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.21% (R.M.S)
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm
Back tension :	3 ± 4g-cm (FWD, REV)

<6ZM-3>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.25% (R.M.S)
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm
Back tension :	3 ± 4g-cm (FWD, REV)

PB Output level :	2.9V ± 3dB (SP OUT 2V)
REC/PB Output level :	1.9V ± 3dB (SP OUT 2V)
Distortion (REC/PB) :	Less than 2.0% (NORM, CrO2)
Noise level (PB) :	Less than 18mV (DOLBY NR ON / OFF NORM. Vol MAX.)
Noise level (REC/PB) :	Less than 20mV (DOLBY NR ON / OFF NORM.)
Crosstalk :	More than 60dB (1kHz, 0VU)
Channel separation :	More than 30dB (1kHz, 0VU)
Erasing ratio :	More than 60dB (at 125Hz)
Test tape :	NORMAL : TTA–602 CrO2 : TTA–320

MECHANICAL EXPLODED VIEW 1 / 1

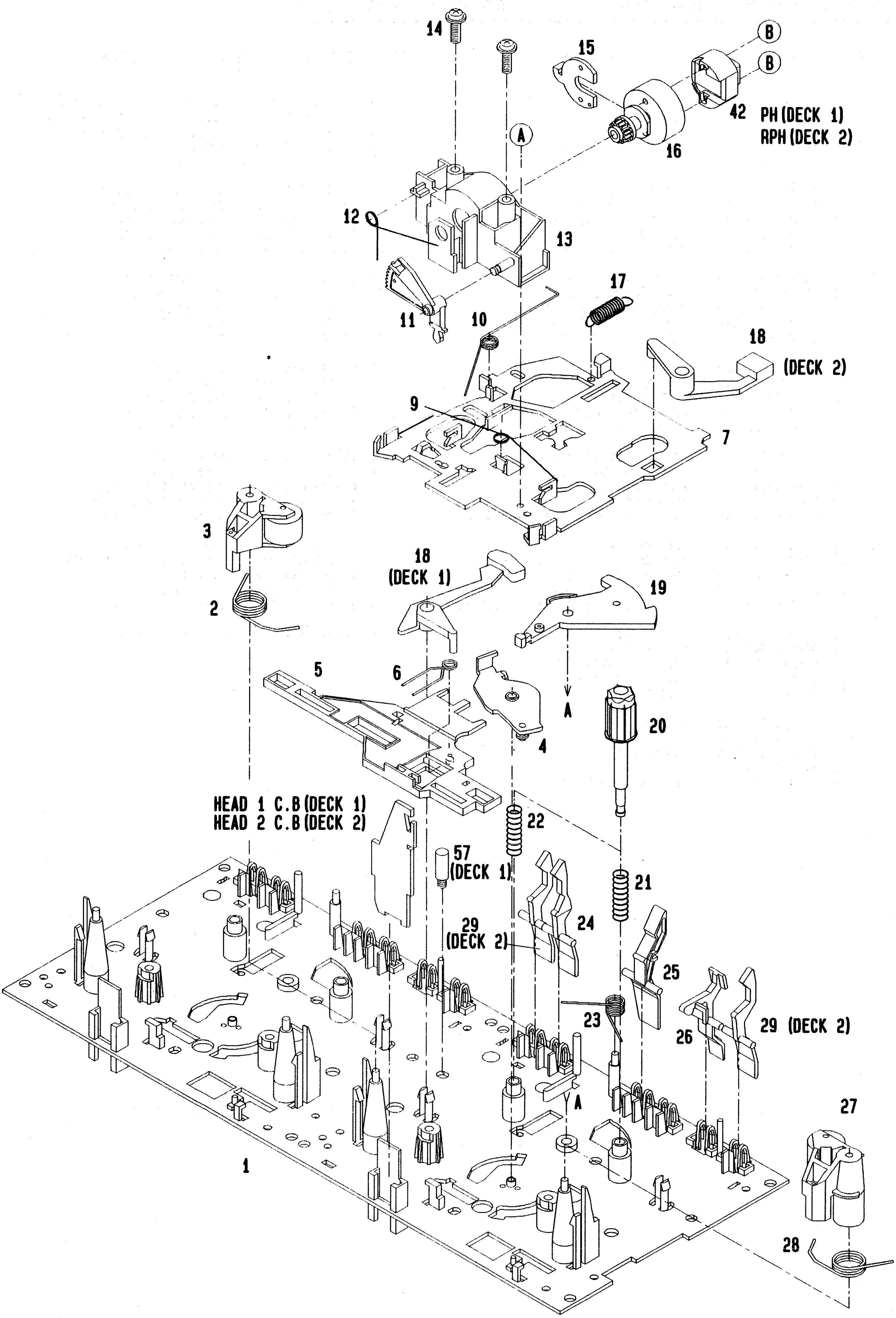

MAIN C.B
HLDR,PWB-M
F
A
HT-SINK,ASSY
b
a
30
31
4ZG-1
Z1DNM
18
22
FRONT C.B
AC1 C.B <EXCEPT 32HR,36HR>
PT C.B <32HR,36HR>
D
BINDER,
WIRE
<30EZ,33EZ
35EZ,30K>
AC2 C.B
23
BINDER,
WIRE
13
14
25
21
24
12
C
G
20
19
9
16
34 <32HR,36HR>
17
8
7
11
<30V,30K,30EZ
33EZ,35EZ>
10
E
15
32
B
CHAS,MAIN
H
33
26
27
28
29
2ZM-3 MK2 PR4NM <36HR,33EZ>
6ZM-3 PR1NM <30V,30K,30EZ,35EZ>
6ZM-3 PR2NM <32HR>
3
5
4
1
2
6

MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NF6-041-010		WINDOW,CASS 1
2	87-NF6-042-010		WINDOW,CASS 2
3	87-NF6-011-010		BOX,CASS 1H<36HR>
3	87-NF7-013-010		BOX,CASS 1U<30V,30K,30EZ,35EZ>
3	87-NF7-010-110		BOX,CASS 1H<32HR>
3	87-NF6-013-210		BOX,CASS 1E<33EZ>
4	87-NF6-012-010		BOX,CASS 2H<36HR>
4	87-NF7-014-010		BOX,CASS 2U<30V,30K,30EZ,35EZ>
4	87-NF7-012-110		BOX,CASS 2H<32HR>
4	87-NF6-014-210		BOX,CASS 2E<33EZ>
5	82-NF5-218-010		SPR-T,EJECT 1(SIN)
6	82-NF5-219-010		SPR-T,EJECT 2(SIN)
7	87-NF7-018-010		PANEL,FR E<30EZ,33EZ,35EZ>
7	87-NF7-076-010		PANEL,FR H HIGH<36HR>
7	87-NF7-016-010		PANEL,FR U<30V,30K>
7	87-NF7-015-010		PANEL,FR LH<32HR>
8	87-NF7-034-010		WINDOW,DISPLAY E<30EZ>
8	87-NF7-031-010		WINDOW,DISPLAY H<36HR>
8	87-NF7-035-010		WINDOW,DISPLAY K<30V,30K>
8	87-NF7-038-010		WINDOW,DISPLAY<32HR>
8	87-NF7-039-010		WINDOW,DISPLAY<33EZ>
8	87-NF7-030-010		WINDOW,DISPLAY<35EZ>
9	87-NF6-043-010		WINDOW,CD
10	87-NF6-036-010		KNOB,RTRY VOL
11	87-NF6-037-010		KNOB,RTRY MIC<EXCEPT 32HR,36HR>
12	87-NF7-027-010		KEY,DEMO E<30EZ,33EZ,35EZ>
12	87-NF7-026-010		KEY,DEMO H<32HR,30V,30K,36HR>
13	87-085-185-010		BUSHING,AC CORD(E) CM-22B
⚠ 14	87-050-016-010		AC CORD ASSY,E<33EZ>
⚠ 14	87-050-079-010		AC CORD ASSY,E BLK<EXCEPT 30K,33EZ>
14	87-A80-023-010		AC CORD ASSY,K 3P W<30K>
15	87-NF7-004-110		CABI,FR E<30V,30K,30EZ,35EZ>
15	87-NF7-071-010		CABI,FR H-HIGH<36HR>
15	87-NF7-001-110		CABI,FR H<32HR>
15	87-NF7-072-110		CABI,FR E<33EZ>
16	87-063-165-010		OIL-DMPR,150
17	87-NF7-021-010		KEY,CD
18	86-NF6-007-010		WINDOW,TOP
19	87-NF7-028-010		KEY,DSP<32HR>
19	87-NF7-082-010		KEY,DSP HIGH<36HR>
19	87-NF7-024-010		KEY,REC<EXCEPT 32HR,36HR>
20	87-NF7-025-010		KEY,PLAY<EXCEPT 32HR,36HR>
20	87-NF7-029-010		KEY,PLAY REV<32HR,36HR>
21	87-NF7-022-010		KEY,FUNCTION
22	87-NF6-021-010		PANEL,TOP
23	87-NF7-058-010		CABI,REAR EZ<30EZ>
23	87-NF7-043-010		CABI,REAR HRJSTNM<36HR>
23	87-NF7-047-010		CABI,REAR KSTNE<30K>
23	87-NF7-052-110		CABI,REAR<32HR>
23	87-NF7-048-110		CABI,REAR<30V>
23	87-NF7-053-110		CABI,REAR<33EZ>
23	87-NF7-059-110		CABI,REAR<35EZ>
24	87-NF6-025-010		KEY,POWER
25	87-NF6-034-010		KEY,KARAOKE
26	87-NF4-216-010		HLDR,LOCK 1
27	82-NF5-228-010		SPR-C,LOCK
28	82-NF5-229-010		PLATE,LOCK
29	87-NF4-217-010		HLDR,LOCK 2
30	82-NE6-067-010		BADGE,AIWA 30N
31	87-NF6-018-010		PANEL,TRAY E
32	87-NF6-022-010		PANEL,LEFT
33	87-NF6-023-010		PANEL,RIGHT
34	87-NF6-028-010		KEY,MIC<32HR,36HR>
A	87-067-703-010		BVT2+3-10 W/O SLOT
B	87-721-096-410		QT2+3-10 W/O SLOT
C	87-721-097-410		QT2+3-12 W/O SLOT
D	87-078-019-010		S-SCREW,IT+4-6 SWCH12A
E	87-067-688-010		BVTT+3-6
F	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
G	87-723-096-410		QT2+3-10 W/O SLOT
H	87-067-641-010		UTT2+3-8 W/O SLOT

TAPE MECHANISM EXPLODED VIEW 1 / 1 (2ZM-3 MK2)


14
15
B
B
A
42 PH (DECK 1)
RPH (DECK 2)
16
12
13
17
11
10
18
(DECK 2)
9
7
3
18
(DECK 1)
19
2
5
6
A
4
20
HEAD 1 C.B (DECK 1)
HEAD 2 C.B (DECK 2)
22
57
(DECK 1)
21
24
29
(DECK 2)
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23
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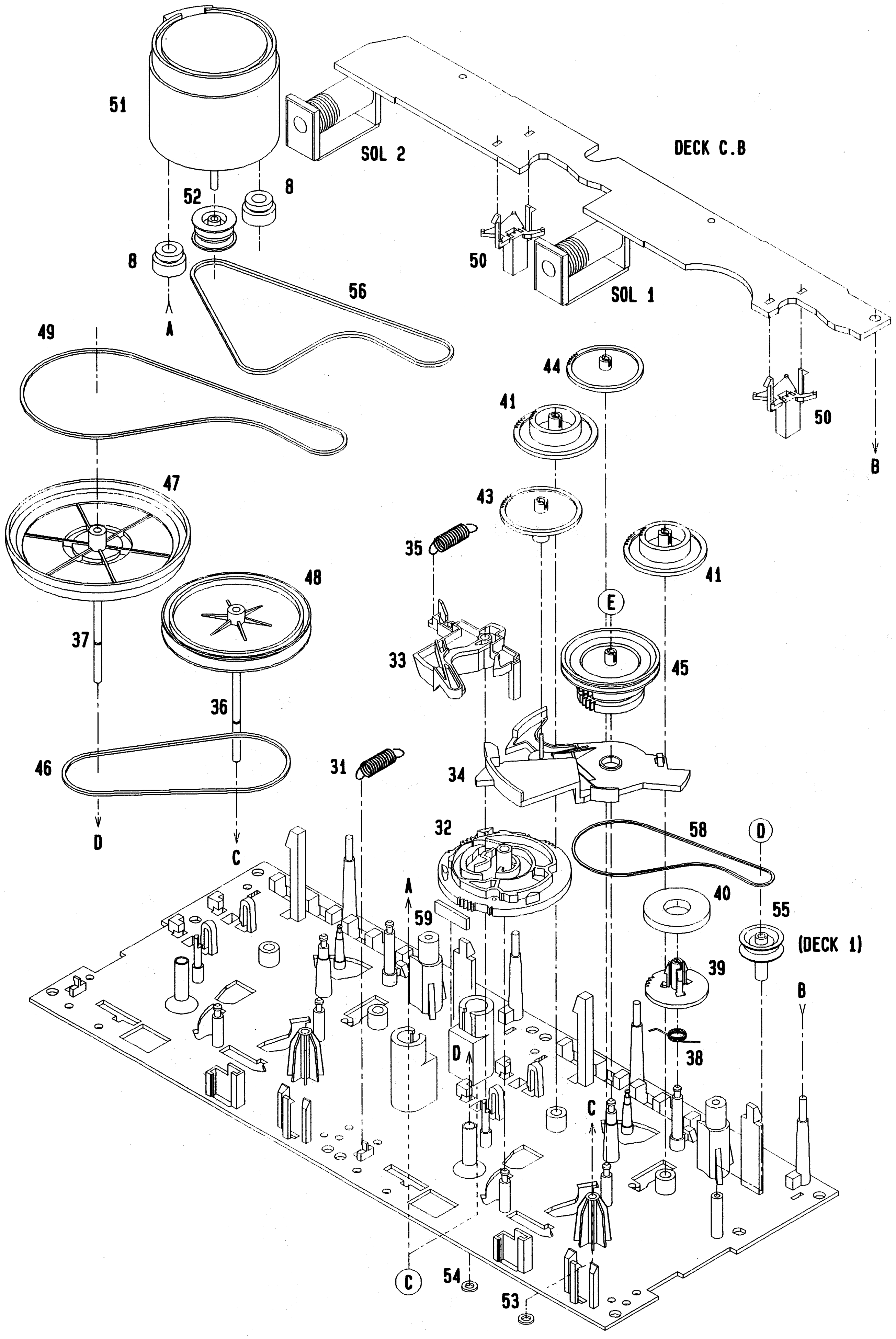
29 (DECK 2)
A
27
1
28

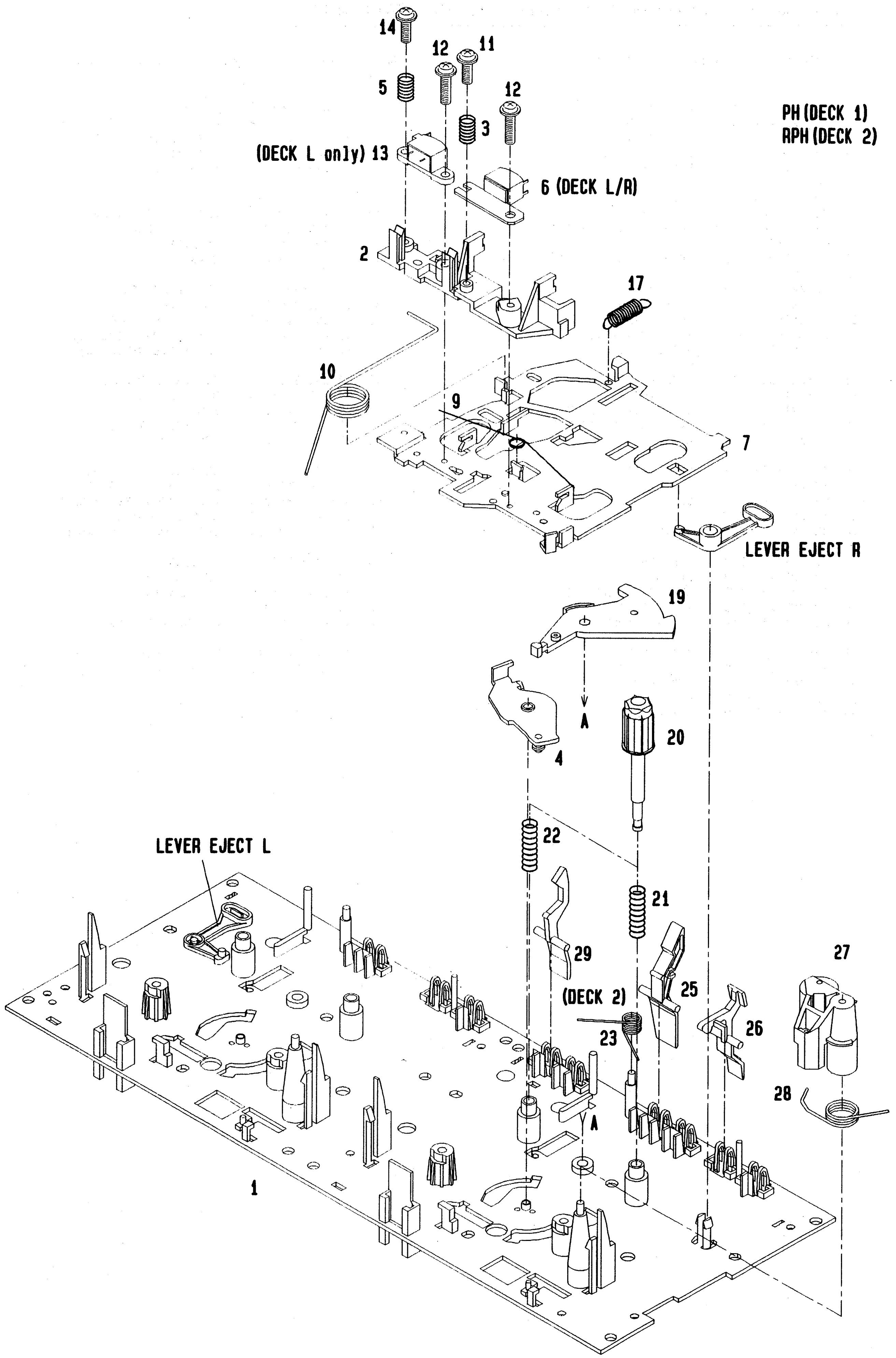


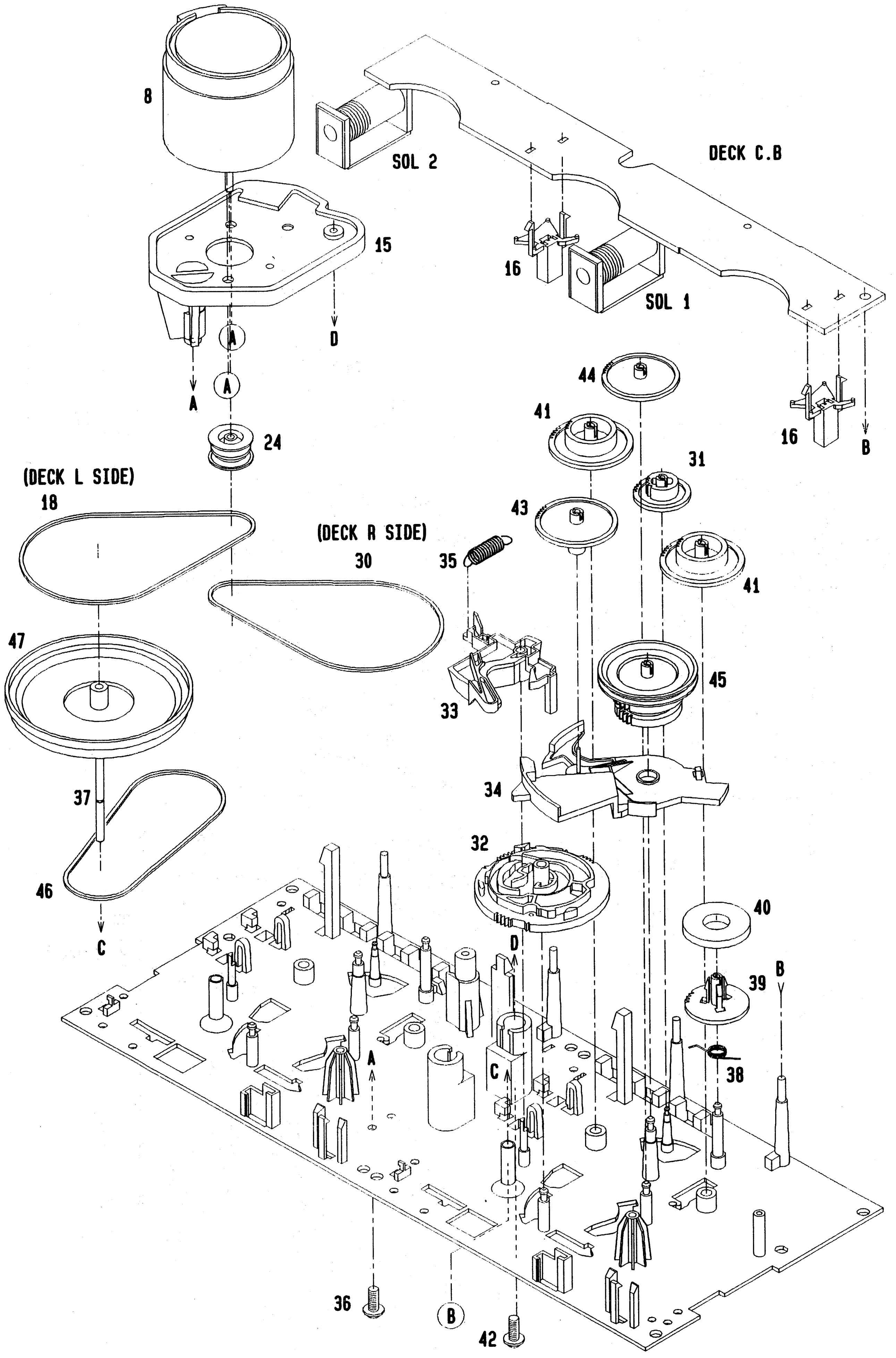
TAPE MECHANISM PARTS LIST 1 / 1 <2ZM-3 MK2>

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-319-010		HEAD,PH HADKH2 FPC
42	87-A90-320-010		HEAD,RPH HADKH5 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

TAPE MECHANISM EXPLODED VIEW 1 / 1 (6ZM-3 PR1)


14
12
11
12
5
3
PH (DECK 1)
RPH (DECK 2)
(DECK L only) 13
6 (DECK L/R)
2
17
10
9
7
LEVER EJECT R
19
4
A
20
22
LEVER EJECT L
21
29
(DECK 2)
25
23
26
27
28
A
1

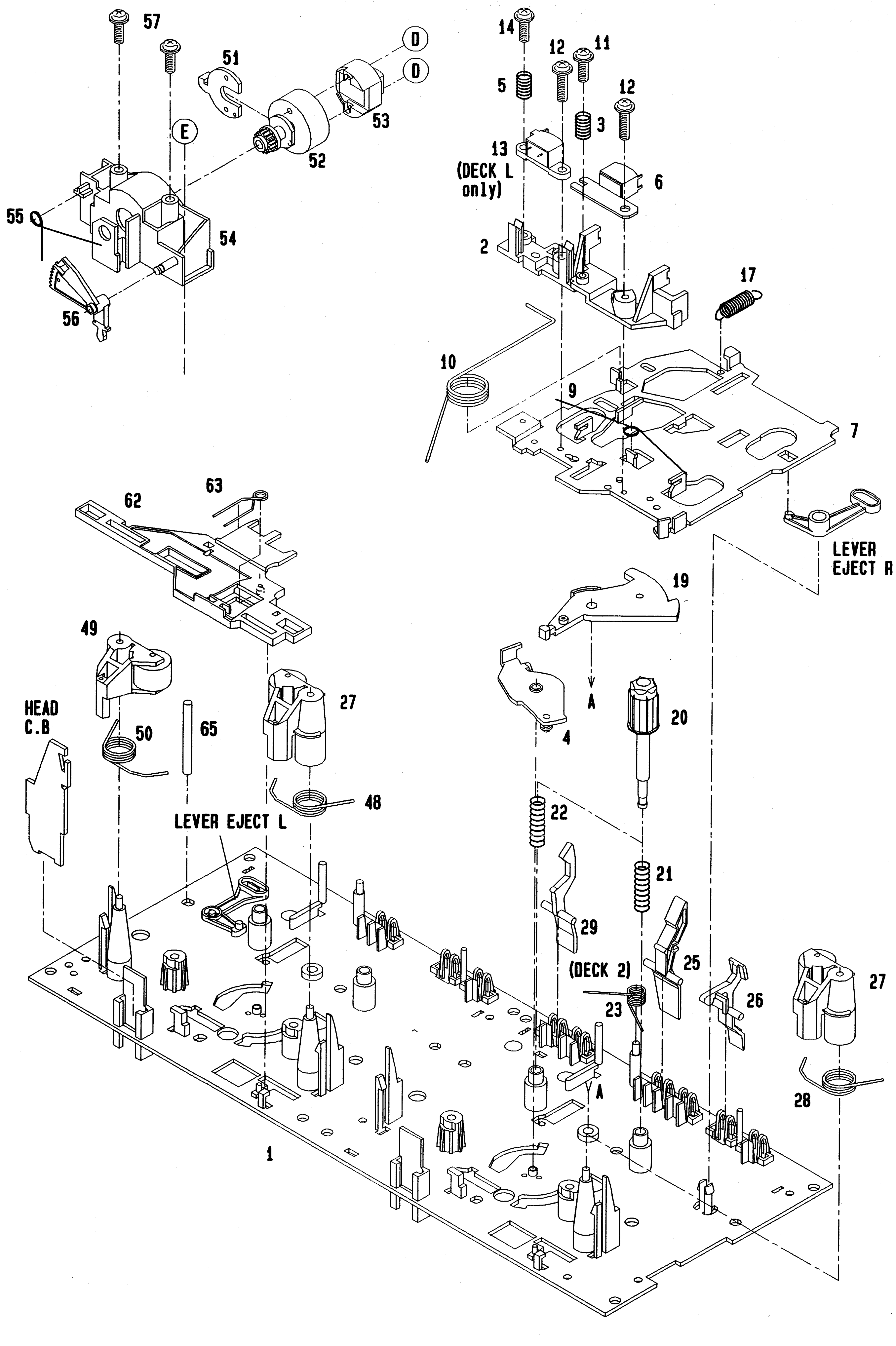

8
SOL 2
DECK C.B
15
16
SOL 1
A
A
A
D
44
41
16
B
24
31
(DECK L SIDE)
18
43
(DECK R SIDE)
30
35
41
47
45
33
34
37
32
46
C
40
D
B
39
A
C
38
36
B
42

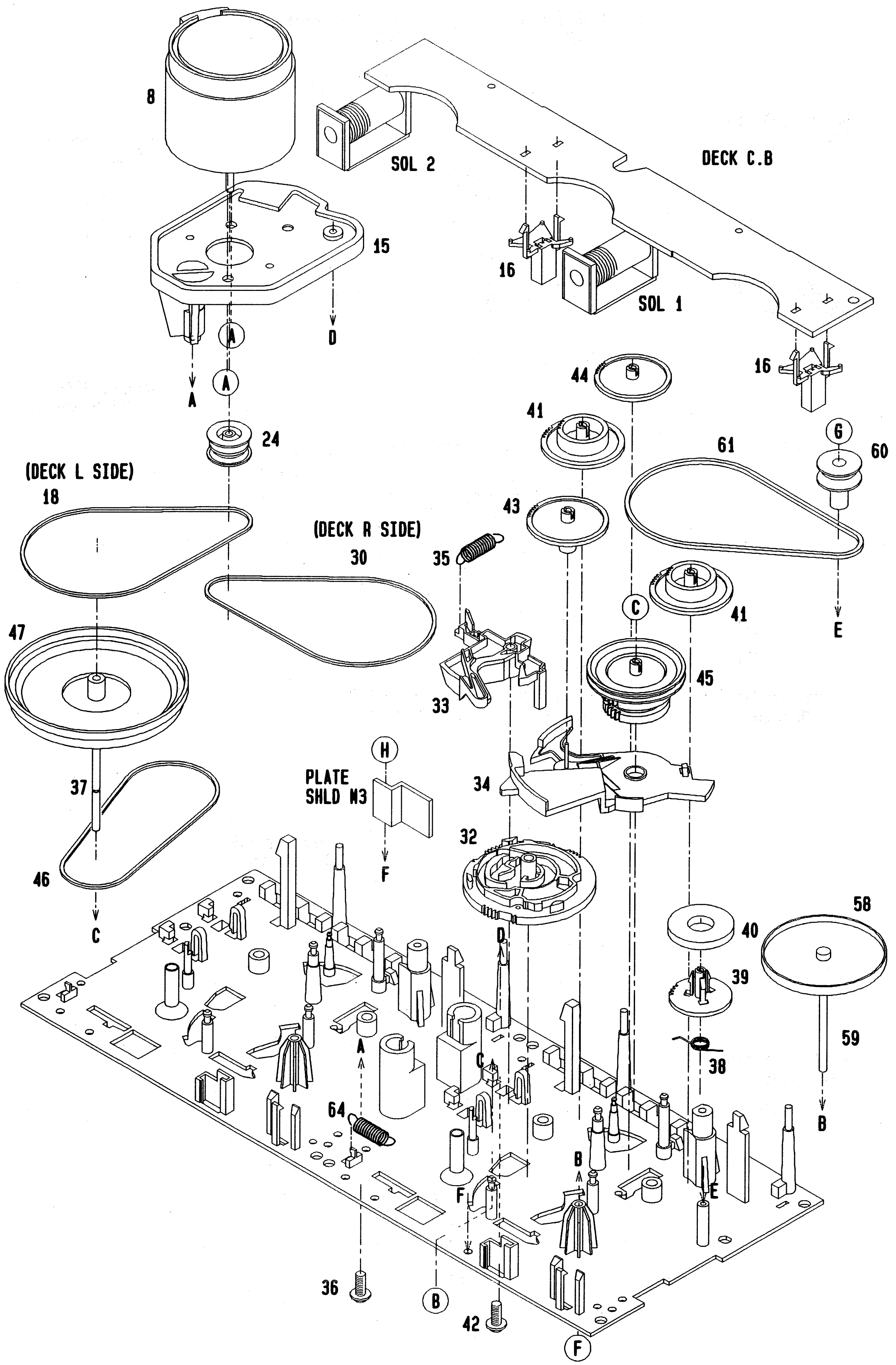
TAPE MECHANISM PARTS LIST 1 / 1 <6ZM-3 PR1>

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZM3-212-010		CHAS ASSY,SS
2	86-ZM3-202-010		BASE,HEAD S
3	86-ZM3-205-010		SPR-C,RPH S
4	82-ZM1-333-210		PLATE,LINK 2
5	86-ZM3-206-010		SPR-C,EH S
6	87-A90-403-019		HEAD,RPH MS15R
7	86-ZM3-201-010		CHAS,HEAD S
8	87-045-347-019		MOT,SHU2L 70(M1)
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM3-323-119		SPR-T,LINK
11	86-ZM3-209-010		S-SCREW,ASIMUTHS
12	86-ZM3-207-010		S-SCREW,RPH
13	87-A90-404-019		HEAD,EH LE15B
14	86-ZM3-208-010		S-SCREW,EH
15	86-ZM3-203-010		HLDR,MOTS
16	82-ZM1-245-210		HLDR,IC
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM3-329-210		BELT,SBU R2
19	82-ZM1-222-219		LVR,PLAY
20	82-ZM1-217-419		REEL TABLE
21	82-ZM1-244-519		SPR-C,BT
22	82-ZM1-285-410		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM3-221-010		PULLEY,MOT 2M
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-119		LVR ASSY,PINCH
28	86-ZM3-204-010		SPR-T,PINCHDS
29	82-ZM1-240-119		LVR,REC (DECK 2)
30	82-ZM3-328-110		BELT,SBU P2
31	82-ZM1-223-010		GEAR,PLAY
32	82-ZM3-305-019		GEAR,CAM M2
33	82-ZM1-227-319		LVR,TRIG
34	82-ZM3-306-110		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	85-ZM3-203-019		S-SCREW MOTOR M3
37	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-319		GEAR,REEL
42	85-ZM3-213-010		S-SCREW,HLDR,MOT 3
43	82-ZM1-225-219		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-210		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-019		FLY-WHL RW (DECK L)
47	82-ZM3-331-019		FLY-WHL R2W (DECK R)
A	87-251-071-417		U+2.6-4
B	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT

TAPE MECHANISM EXPLODED VIEW 1 / 1 (6ZM-3 PR2)


57
51
D
D
E
53
52
55
54
56
14
12
11
5
12
3
13
(DECK L only)
6
2
17
10
9
7
63
62
LEVER EJECT R
19
49
27
HEAD C.B
50
65
4
A
20
48
22
LEVER EJECT L
21
29
(DECK 2)
25
26
27
23
A
28
1

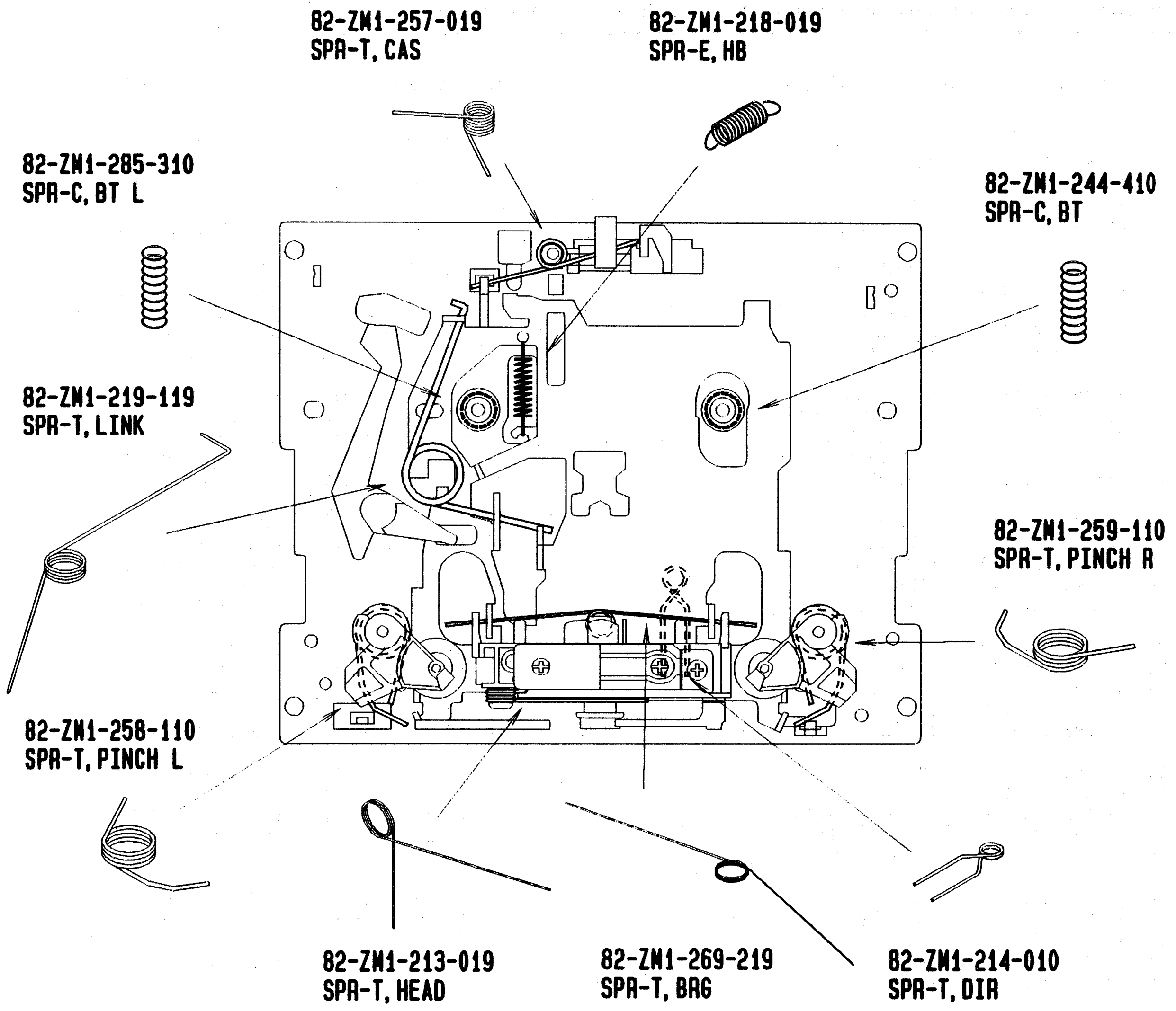


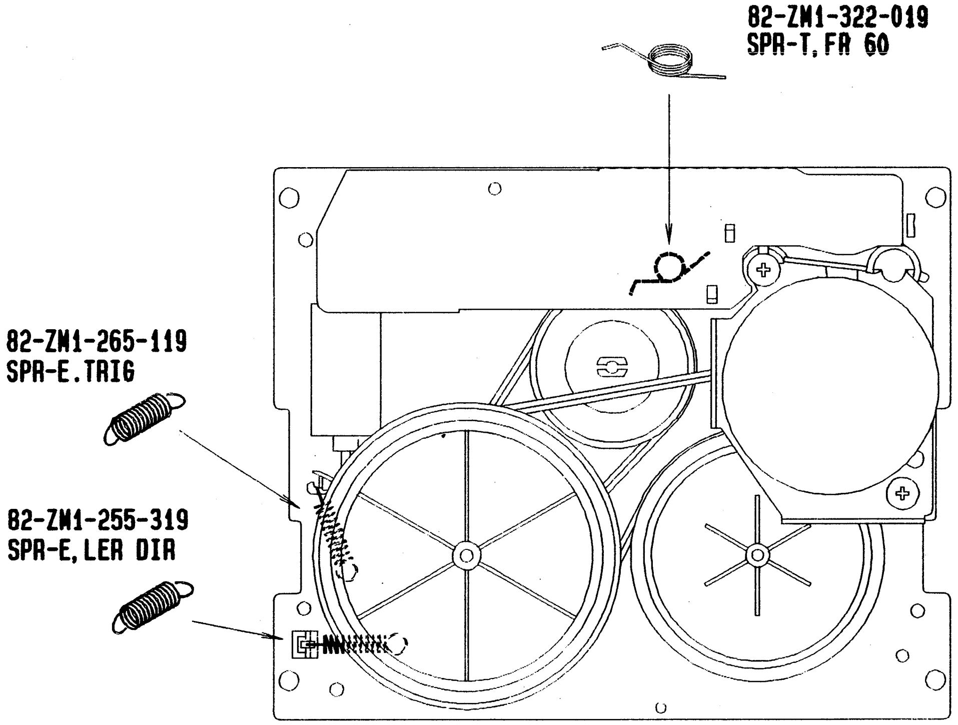
TAPE MECHANISM PARTS LIST 1 / 1 <6ZM-3 PR2>

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

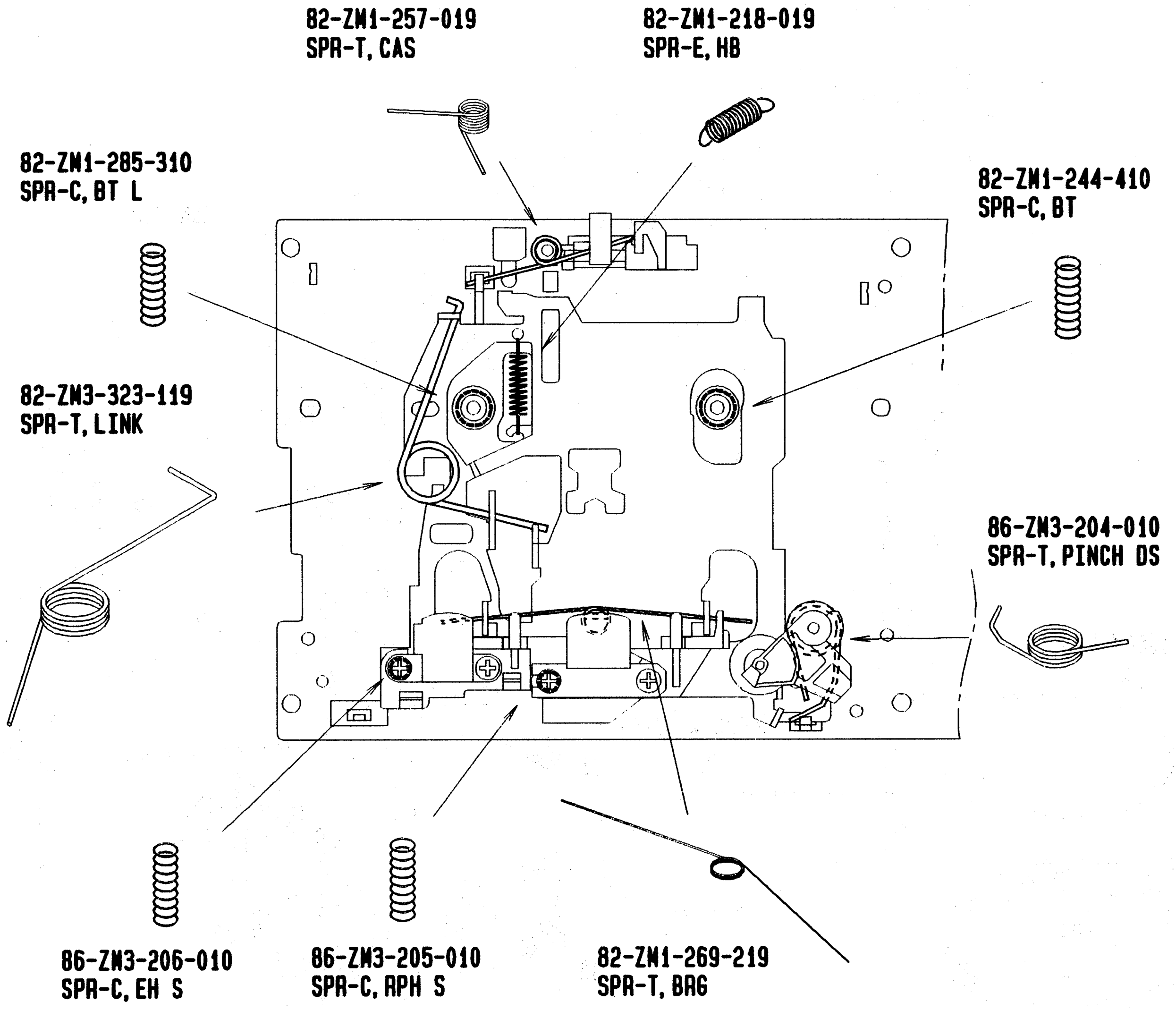
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZM3-215-010		CHAS ASSY,RS
2	86-ZM3-202-010		BASE,HEAD S
3	86-ZM3-205-010		SPR-C,RPH S
4	82-ZM1-333-210		PLATE,LINK 2
5	86-ZM3-206-010		SPR-C,EH S
6	87-A90-403-019		HEAD,RPH MS15R
7	86-ZM3-201-010		CHAS,HEAD S(DECK L)
7	82-ZM3-206-910		CHAS,HEAD(DECK R)
8	87-045-347-019		MOT,SHU2L 70(M1)
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-110		SPR-T,LINK
11	86-ZM3-209-010		S-SCREW,ASIMUTHS
12	86-ZM3-207-010		S-SCREW,RPH
13	87-A90-404-019		HEAD,EH LE15B
14	86-ZM3-208-010		S-SCREW,EH
15	86-ZM3-203-010		HLDR,MOTS
16	82-ZM1-245-210		HLDR,IC
17	82-ZM1-218-019		SPR-E,HB
18	86-ZM3-214-010		BELT,SUB RR
19	82-ZM1-222-219		LVR,PLAY
20	82-ZM1-217-419		REEL TABLE
21	82-ZM1-244-519		SPR-C,BT
22	82-ZM1-285-410		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM3-221-010		PULLEY,MOT 2M
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-119		LVR ASSY,PINCH
28	86-ZM3-204-010		SPR-T,PINCHDS
29	82-ZM1-240-119		LVR,REC (DECK 2)
30	86-ZM3-210-010		BELT,RS
32	82-ZM3-305-119		GEAR,CAM M2
33	82-ZM1-227-319		LVR,TRIG
34	82-ZM3-306-110		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	87-761-073-419		VFT2+2.6-6 W/O SLOT
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-319		GEAR,REEL
42	86-ZM3-213-010		S-SCREW,HLDR,MOT 3
43	82-ZM1-225-219		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-019		FLY-WHL RW (DECK L)
47	82-ZM3-338-010		FLY-WHL R3W (DECK R)
48	82-ZM1-259-210		SPR-T,PINCH R
49	82-ZM1-341-110		LVR ASSY,PINCH L2
50	82-ZM1-258-210		SPR-T,PINCH L
51	82-ZM1-314-110		PLATE,HEAD
52	82-ZM1-208-310		HLDR,HEAD
53	87-A90-366-010		HEAD,PH YK50P-BF414
54	82-ZM1-207-810		GUIDE TAPE
55	82-ZM1-213-010		SPR-T,HEAD
56	82-ZM1-210-110		GEAR,HT
57	86-ZM4-206-010		S-SCREW AZIMUTH L
58	82-ZM1-348-010		FLY-WHL,LW
59	82-ZM1-236-019		CAPSTAN N 2-41.5
60	82-ZM3-335-210		PULLEY,COUPLER M3
61	86-ZM1-206-010		BELT,MAIN L
62	82-ZM1-266-110		LVR,DIR
63	82-ZM1-214-010		SPR-T,DIR
64	82-ZM1-255-310		SPR-E,LVR DIR
65	82-ZM3-339-010		SHAFT,COUPLER N3
A	87-251-071-417		U+2.6-4
B	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
C	82-ZM3-334-010		PW,2.16-6-0.4
D	80-ZM6-207-010		V+1.6-7
E	85-ZM3-202-010		S-SCREW TG
F	82-ZM1-288-010		SH,1.63-3.2-0.5 SLT
G	87-B10-043-010		W-P,0.99-4-0.25 SLT
H	87-571-032-410		VIT+2-3

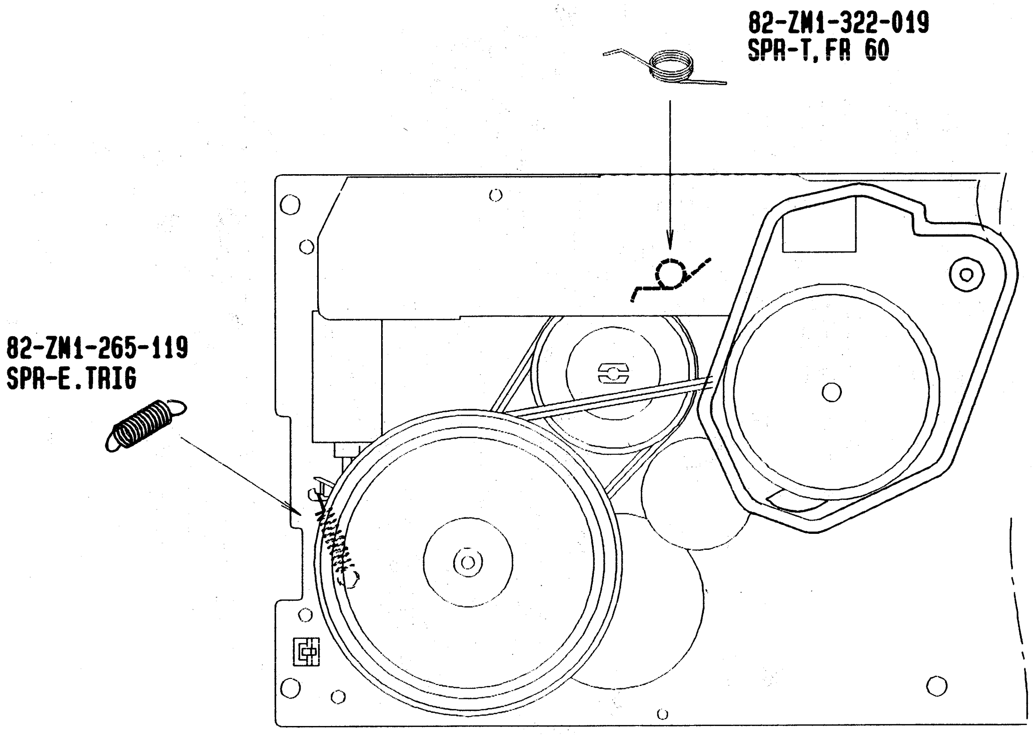
SPRING APPLICATION POSITION (2ZM-3 MK2)


82-ZM1-257-019
SPR-T, CAS
82-ZM1-218-019
SPR-E, HB
82-ZM1-285-310
SPR-C, BT L
82-ZM1-244-410
SPR-C, BT
82-ZM1-219-119
SPR-T, LINK
82-ZM1-259-110
SPR-T, PINCH R
82-ZM1-258-110
SPR-T, PINCH L
82-ZM1-213-019
SPR-T, HEAD
82-ZM1-269-219
SPR-T, BRG
82-ZM1-214-010
SPR-T, DIR

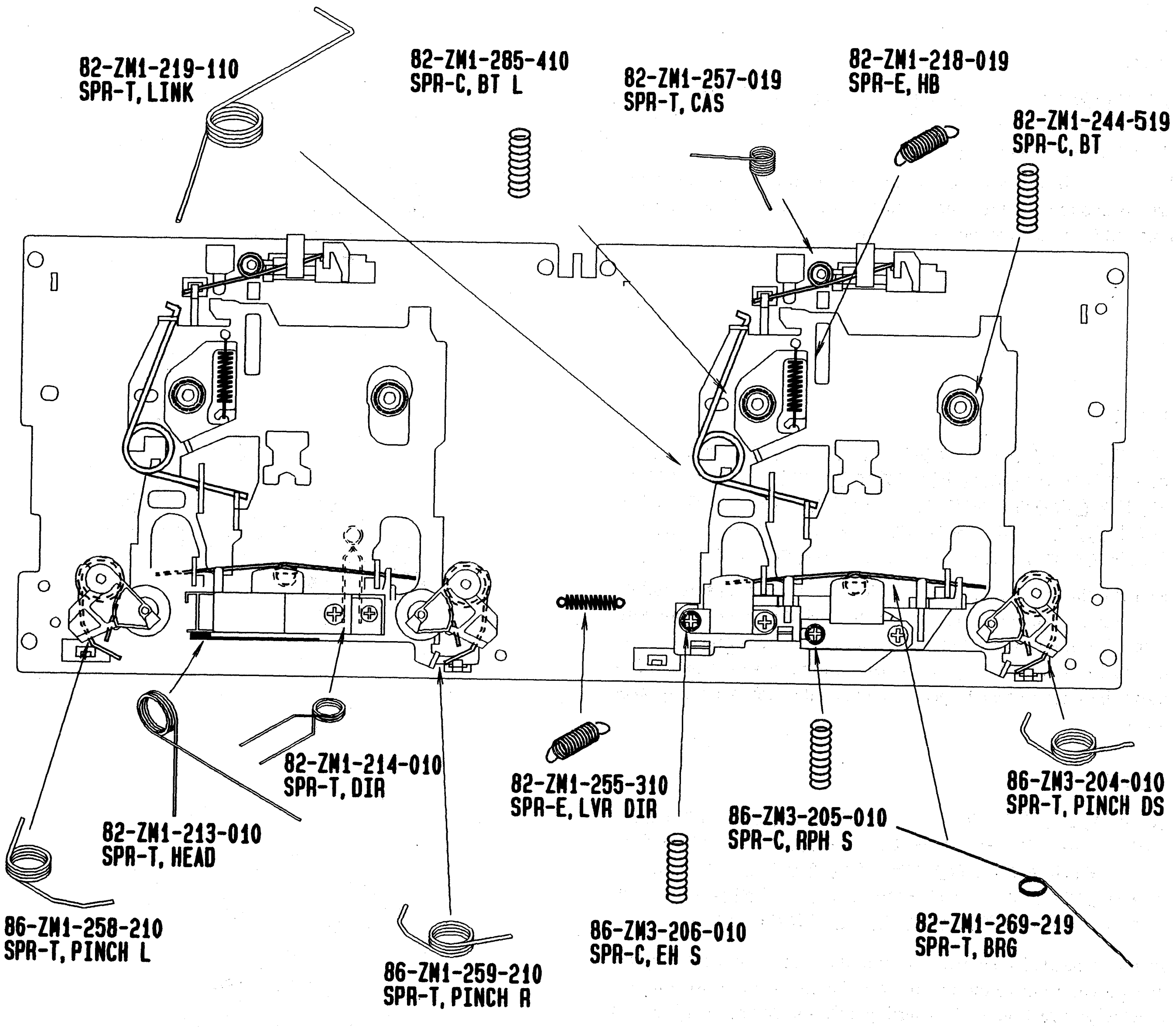

82-ZM1-322-019
SPR-T, FR 60
82-ZM1-265-119
SPR-E.TRIG
82-ZM1-255-319
SPR-E, LER DIR

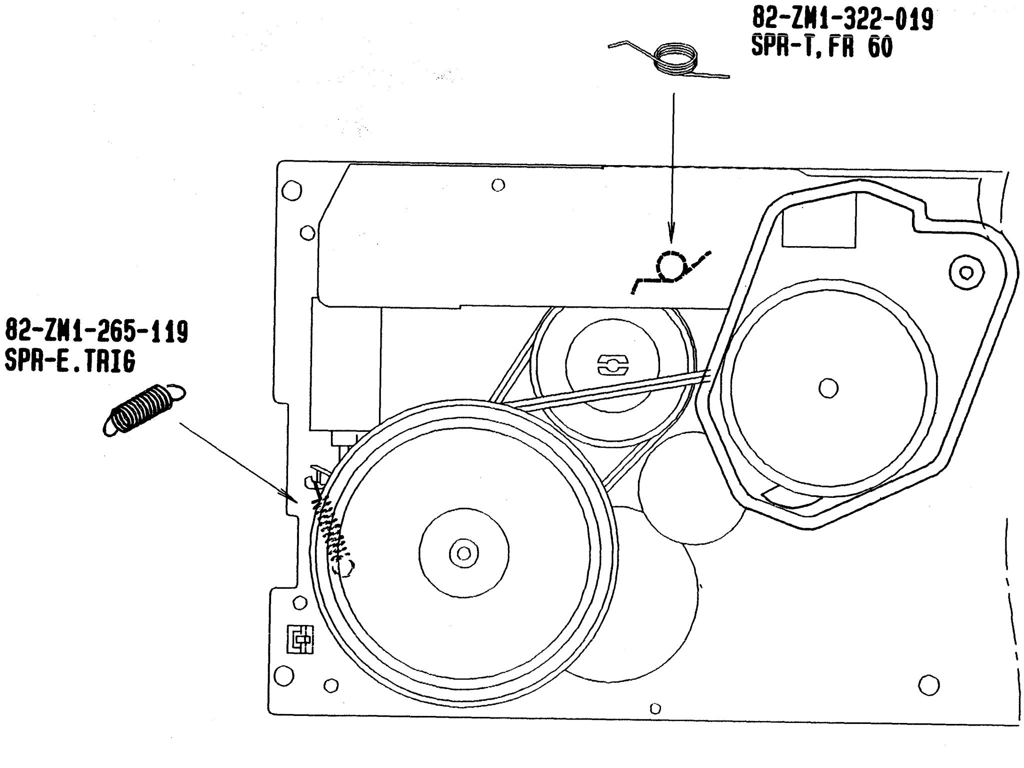
SPRING APPLICATION POSITION (6ZM-3 PR1)


82-ZM1-257-019
SPR-T, CAS
82-ZM1-218-019
SPR-E, HB
82-ZM1-285-310
SPR-C, BT L
82-ZM1-244-410
SPR-C, BT
82-ZM3-323-119
SPR-T, LINK
86-ZM3-204-010
SPR-T, PINCH DS
86-ZM3-206-010
SPR-C, EH S
86-ZM3-205-010
SPR-C, APH S
82-ZM1-269-219
SPR-T, BRG


82-ZM1-322-019
SPR-T, FR 60
82-ZM1-265-119
SPR-E.TRIG

SPRING APPLICATION POSITION (6ZM-3 PR2)


82-ZM1-219-110
SPR-T, LINK
82-ZM1-285-410
SPR-C, BT L
82-ZM1-257-019
SPR-T, CAS
82-ZM1-218-019
SPR-E, HB
82-ZM1-244-519
SPR-C, BT
82-ZM1-214-010
SPR-T, DIR
82-ZM1-255-310
SPR-E, LVR DIR
86-ZM3-204-010
SPR-T, PINCH DS
82-ZM1-213-010
SPR-T, HEAD
86-ZM3-205-010
SPR-C, RPH S
86-ZM1-258-210
SPR-T, PINCH L
86-ZM3-206-010
SPR-C, EH S
82-ZM1-269-219
SPR-T, BRG
86-ZM1-259-210
SPR-T, PINCH R

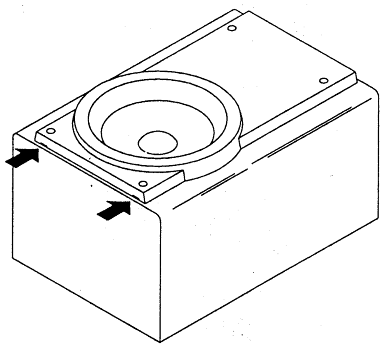

82-ZM1-322-019
SPR-T, FR 60
82-ZM1-265-119
SPR-E.TRIG

SPEAKER DISASSEMBLY INSTRUCTION (SX-NS30 / SX-R270)

Type.1

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

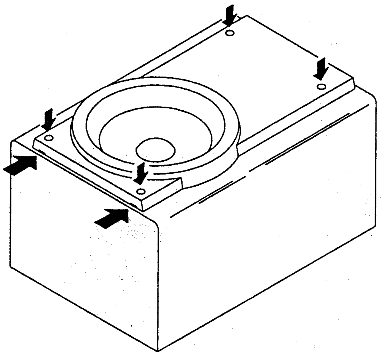
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.2

グリルフレームを外し、4個のゴムキャップをマイナスドライバーで端の方から持ち上げて外すと中にビスが有りますので、ビスを取り外します。矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

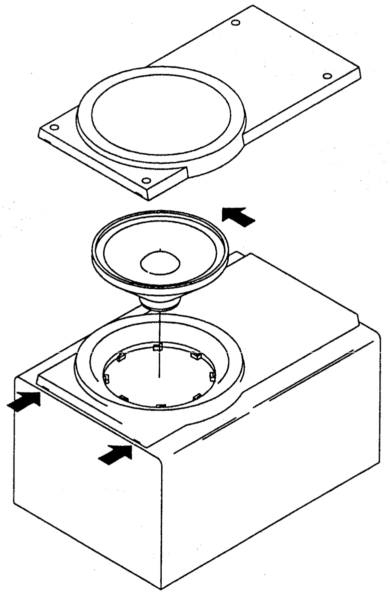
Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットの凹にマイナスドライバーを差し込んで、反時計方向に回転させスピーカーユニットを外してください。スピーカーユニット交換後は時計方向にクリック音がするまで、回転させて取り付けます。

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counterclockwise direction while inserting a flat-bladed screwdriver into one of the hollows arround speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



SPEAKER PARTS LIST (SX-NS30 -> YST,YJ1ST)

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NSH-001-019		PANEL,FR R
2	87-NSH-002-019		PANEL,FR L
3	87-NSH-005-019		NET
4	87-NS7-608-019		SPKR,W 140
5	87-NS7-610-019		SPKR,W 60
6	87-NS7-611-019		CORD,SPKR

SPEAKER PARTS LIST (SX-R270 -> YST)

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS1-004-010		GRILLE,FRAME ASSY
2	81-VSA-010-010		SPKR,CORD
3	85-NSX-601-010		SPKR,100

SPEAKER EXPLODED VIEW 1 / 1 (SX-FNS36 -> YJST,YJ3ST)

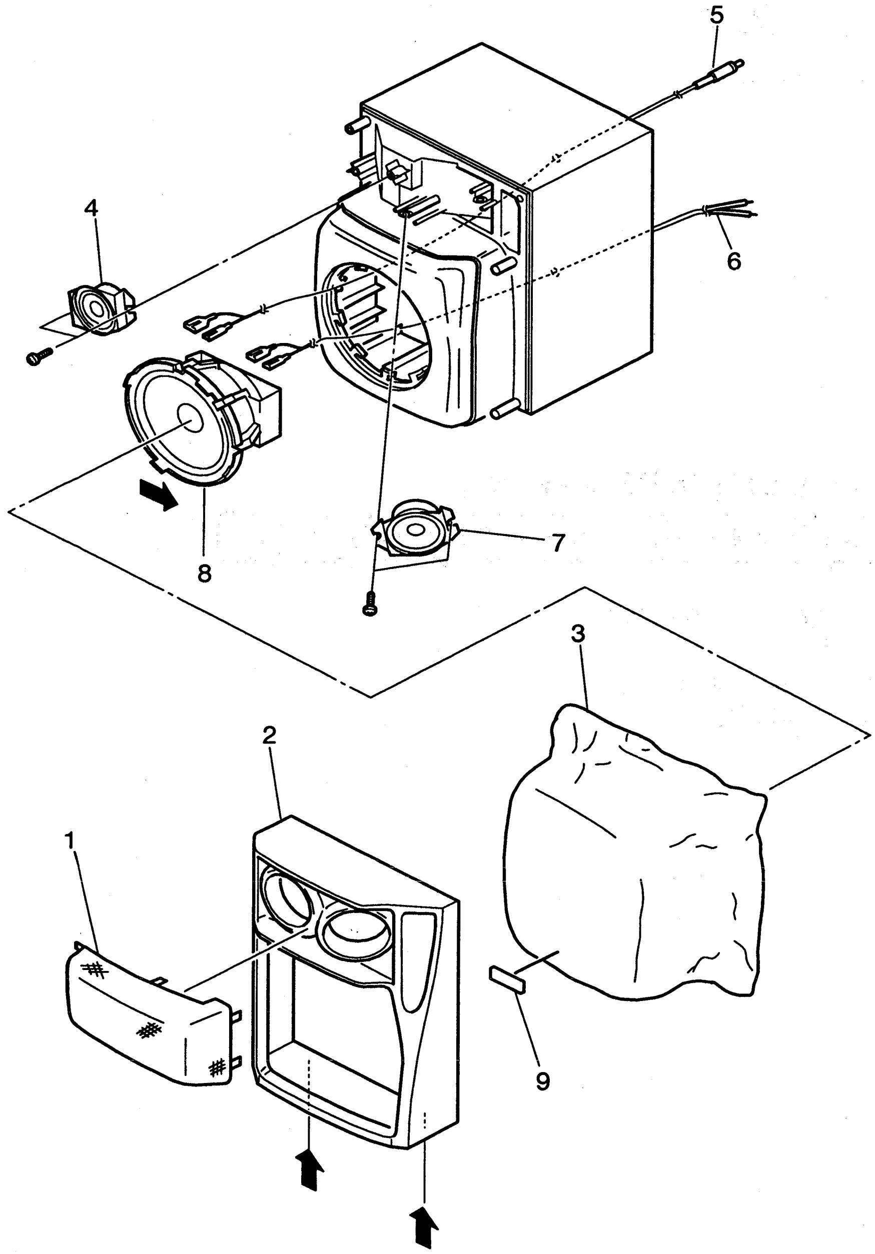
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel.

Remove the screws of each speaker unit and then remove the speaker units.

Insert a flat-bladed screwdriver into the position indicated by thearrows and remove the panel.

Turn the speaker unit to counterclockwise direction while inserting a flat-bladed screwdriver into one of the hollows arround speaker unit, and then remove the speaker unit.

After replacing the speaker unit, install it turnning to clockwise direction unit "click" sound comes out.



SPEAKER PARTS LIST 1 / 1 (SX-FNS36 -> YJST,YJ3ST)

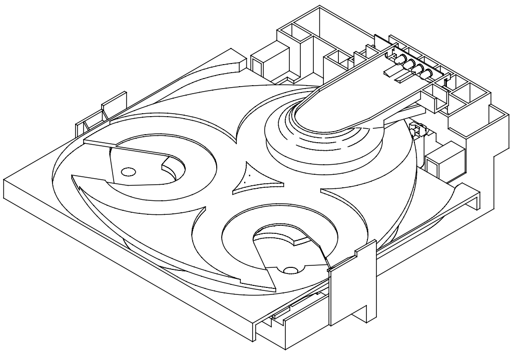
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	87-NS7-006-010		NET
2	87-NS7-001-010		PANEL,FR R(EXCEPT YLJSKM)
2	87-NS7-002-010		PANEL,FR L(EXCEPT YLJSKM)
2	87-NS7-016-010		PANEL,FR R ASSY(YLJKM)
2	87-NS7-017-010		PANEL,FR L ASSY(YLJKM)
3	87-NS7-005-010		PROTECTOR,TW
4	87-NS7-603-010		SPKR,T 60
5	87-NS4-610-010		SPKR,CODE Y/B(EXCEPT YLJSKM)
5	87-NS7-615-010		SPKR,CORD Y/B(YLJSLM)
6	87-NS6-601-010		SPKR,CORD(EXCEPT YLJSKM)
6	87-NS7-614-010		SPKR,CORD(YLJSKM)
7	87-NS7-606-010		SPKR,SU 60
8	87-NS7-602-010		SPKR,W 140
9	86-NS5-012-010		BADGE,AIWA 35(YLJSKM)
10	87-NS7-022-010		VTS2+3.5-12(YLJSKM)

aiwa

aiwa
SERVICE

4ZG-1



CD MECHANISM

• BASIC CD MECHANISM:3ZG-2 E1

• TYPE: English

SERVICE MANUAL

BASIC NAME	DERIVATION NAME					
4ZG-1	V	O	S1	D	SH	

■ This Service Manual has various derivation.Derivation name is indicated by the Service Manual for each model.

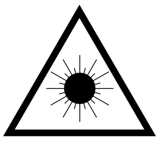
S/M Code No. 09-985-249-80T

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

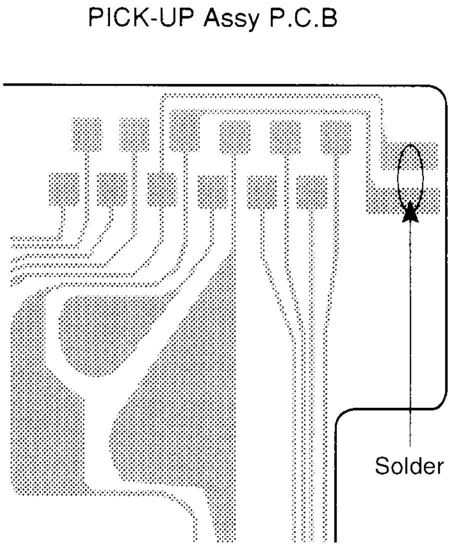
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block (KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.



This is the SERVICE MANUAL for the BASIC CD MECHANISM of BASIC NAME: 4ZG-1. This BASIC NAME includes the following models as shown under the SUFFIX name: DERIVATION NAME. Please use this manual with the separate SERVICE MANUAL for DERIVATION NAME.

BASIC CD MECHANISM: 4ZG-1 VOS1DSH
SUFFIX
(DERIVATION NAME)

BASIC NAME: 4ZG-1

BASIC NAME	DERIVATION NAME							
4ZG-1	V	O	S1	D	SH	—	—	—

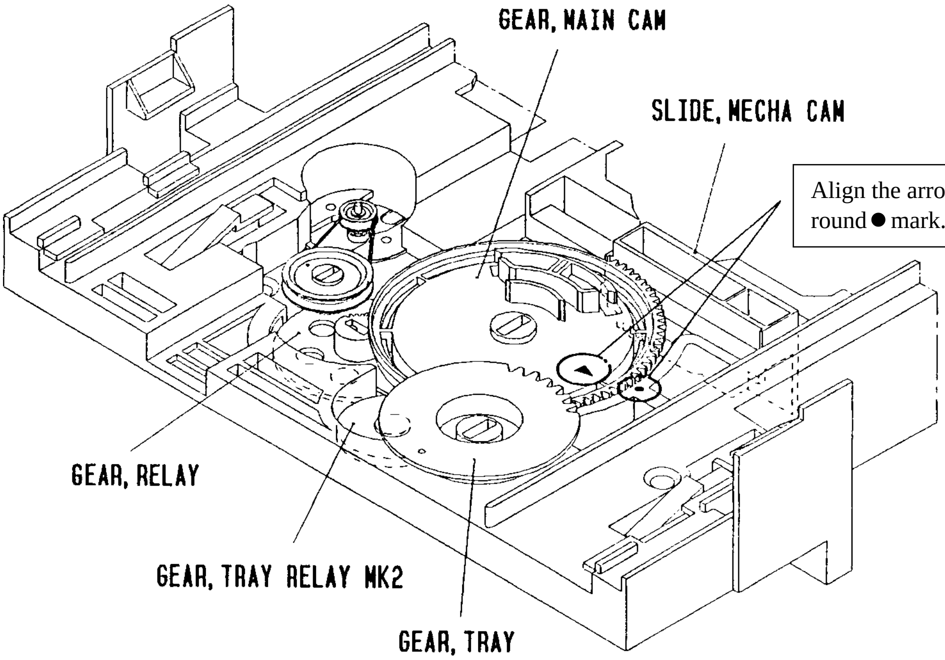
DERIVATION NAME

V: VIDEO OUT
O: On screen display
S1: THE 1st SONY IC MODEL
D: Digital output function
SH: Pick up equipped with shutter

How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.


GEAR, MAIN CAM
SLIDE, MECHA CAM
GEAR, RELAY
GEAR, TRAY RELAY MK2
GEAR, TRAY

Align the arrow ▶ mark with the black round ● mark.

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-547-010		C-IC,CXA1992AR
	87-A20-919-040		C-IC,BA5915FP
	87-A20-917-010		C-IC,CXD2540Q-1/2
	84-ZG1-697-010		C-IC,UPD78016FGC-549
	87-017-825-010		IC,GP1F32T
	87-017-760-080		IC,M51943BML
	87-A20-602-040		C-IC,M5291FP
	87-A20-925-040		C-IC,BA05FP
	87-A20-905-040		C-IC,BA033FP
	87-001-873-010		IC,LB1644
	87-A20-920-010		C-IC,CL680-D1
	87-A20-921-040		C-IC,SN74LVU04APW
	87-A20-656-040		C-IC,MB81V4260S-60/70PFTN
	84-ZG1-695-040		C-IC,LH5V2RN1
	87-A20-975-040		C-IC,SN74LV74APW
	87-A20-974-040		C-IC,LC74781M-9017
	87-A20-918-040		C-IC,SM5878AM
TRANSISTOR			
	87-026-463-080		TR,2SA933S (0.3W)
	87-026-237-080		CHIP-TR,DTC124XK
	89-327-125-080		CHIP TR,2SC2712GR
	87-026-231-080		CHIP-TRANSISTER,DTA124XK
	87-A30-117-010		TR,2SA1357
	89-111-625-080		TR,2SA1162 (0.15W)
	87-026-580-080		C-TR,DTA123JK
	87-026-470-080		TR,HN1C03F (0.3W)
DIODE			
	87-020-027-080		CHIP-DIODE 1SS184
	87-017-024-040		C-DIODE,DA204K
	87-A40-180-040		C-DIODE,SB07-015C
	87-A40-384-080		C-ZENER,UDZ3.3B
3CD C.B			
C101	87-010-182-080		C-CAP,S 2200P-50 B
C102	87-016-669-080		C-CAP,S 0.1-25 K B
C103	87-016-669-080		C-CAP,S 0.1-25 K B
C104	87-016-669-080		C-CAP,S 0.1-25 K B
C105	87-010-404-040		CAP,E 4.7-50 SME
C106	87-016-369-080		C-CAP,S 0.033-25 B K
C107	87-010-197-080		CAP, CHIP 0.01 DM
C108	87-010-401-040		CAP,E 1-50 SME
C109	87-010-382-040		CAP,E 22-25 SME
C110	87-010-213-080		C-CAP,S 0.015-50 B
C111	87-010-263-040		CAP,E 100-10
C112	87-010-197-080		CAP, CHIP 0.01 DM
C113	87-016-369-080		C-CAP,S 0.033-25 B K
C114	87-016-369-080		C-CAP,S 0.033-25 B K
C115	87-016-369-080		C-CAP,S 0.033-25 B K
C116	87-012-158-080		C-CAP,S 390P-50 CH
C117	87-012-154-080		C-CAP,S 150P-50 CH
C118	87-010-494-040		CAP,E 1-50 GAS
C119	87-010-152-080		C-CAP,S 8P-50 CH
C120	87-010-992-080		C-CAP,S 0.047-25 B
C121	87-010-992-080		C-CAP,S 0.047-25 B
C123	87-016-669-080		C-CAP,S 0.1-25 K B
C125	87-010-198-080		CAP, CHIP 0.022
C126	87-016-669-080		C-CAP,S 0.1-25 K B
C127	87-010-555-040		CAP,E 100-10 GAS
C130	87-010-555-040		CAP,E 100-10 GAS
C131	87-010-555-040		CAP,E 100-10 GAS
C132	87-010-178-080		CHIP CAP 1000P
C133	87-010-555-040		CAP,E 100-10 GAS
C134	87-010-196-080		CHIP CAPACITOR,0.1-25
C135	87-010-196-080		CHIP CAPACITOR,0.1-25
C136	87-010-196-080		CHIP CAPACITOR,0.1-25
C137	87-010-196-080		CHIP CAPACITOR,0.1-25
C138	87-010-182-080		C-CAP,S 2200P-50 B
C139	87-010-197-080		CAP, CHIP 0.01 DM
C140	87-010-112-040		CAP,E 100-16
C141	87-010-196-080		CHIP CAPACITOR,0.1-25
C142	87-010-196-080		CHIP CAPACITOR,0.1-25
C143	87-010-213-080		C-CAP,S 0.015-50 B
C151	87-010-263-040		CAP,E 100-10
C152	87-010-197-080		CAP, CHIP 0.01 DM
C153	87-A10-893-040		CAP,E 220-10 M PW
C154	87-010-197-080		CAP, CHIP 0.01 DM
C155	87-010-184-080		CHIP CAPACITOR 3300P(K)
C156	87-010-992-080		C-CAP,S 0.047-25 B
C157	87-010-992-080		C-CAP,S 0.047-25 B
C158	87-012-156-080		C-CAP,S 220P-50 CH
C159	87-016-526-080		C-CAP,S 0.47-16 BK
C160	87-010-314-080		C-CAP,S 22P-50V
C161	87-010-182-080		C-CAP,S 2200P-50 B
C162	87-010-178-080		CHIP CAP 1000P
C201	87-016-669-080		C-CAP,S 0.1-25 K B
C204	87-010-197-080		CAP, CHIP 0.01 DM
C205	87-010-379-040		CAP,E 22-16 M SME
C206	87-010-322-080		C-CAP,S 100P-50 CH
C207	87-010-322-080		C-CAP,S 100P-50 CH
C208	87-010-322-080		C-CAP,S 100P-50 CH
C209	87-010-322-080		C-CAP,S 100P-50 CH
C210	87-016-669-080		C-CAP,S 0.1-25 K B
C211	87-010-263-040		CAP,E 100-10
C213	87-010-190-080		S CHIP F 0.01
C214	87-010-196-080		CHIP CAPACITOR,0.1-25
C301	87-016-251-040		CAP,E 220-16 SMG
C302	87-012-140-080		CAP 470P
C303	87-010-178-080		CHIP CAP 1000P
C304	87-010-384-040		CAP,E 100-25 SME
C305	87-010-982-040		CAP,E 33-25 GAS
C306	87-010-112-040		CAP,E 100-16
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C308	87-010-263-040		CAP,E 100-10
C309	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-263-040		CAP,E 100-10
C311	87-010-196-080		CHIP CAPACITOR,0.1-25
C312	87-010-178-080		CHIP CAP 1000P
C320	87-010-196-080		CHIP CAPACITOR,0.1-25
C401	87-016-044-040		CAP,E 100-16 GAS
C402	87-010-190-080		S CHIP F 0.01
C403	87-010-190-080		S CHIP F 0.01
C501	87-010-197-080		CAP, CHIP 0.01 DM
C502	87-010-197-080		CAP, CHIP 0.01 DM
C503	87-010-197-080		CAP, CHIP 0.01 DM
C504	87-010-154-080		CAP CHIP 10P
C505	87-010-154-080		CAP CHIP 10P
C506	87-010-197-080		CAP, CHIP 0.01 DM
C508	87-010-263-040		CAP,E 100-10
C509	87-016-669-080		C-CAP,S 0.1-25 K B
C510	87-010-263-040		CAP,E 100-10
C511	87-016-669-080		C-CAP,S 0.1-25 K B
C512	87-010-197-080		CAP, CHIP 0.01 DM
C513	87-010-197-080		CAP, CHIP 0.01 DM
C514	87-010-197-080		CAP, CHIP 0.01 DM
C518	87-010-322-080		C-CAP,S 100P-50 CH
C519	87-012-145-080		CAP, CHIP S 270P CH
C520	87-012-157-080		C-CAP,S 330P-50 CH
C521	87-012-154-080		C-CAP,S 150P-50 CH
C522	87-010-371-080		CAP, ELECT 470-6.3V
C523	87-010-197-080		CAP, CHIP 0.01 DM
C524	87-010-197-080		CAP, CHIP 0.01 DM
C525	87-010-197-080		CAP, CHIP 0.01 DM
C526	87-010-197-080		CAP, CHIP 0.01 DM

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C527	87-010-197-080		CAP, CHIP 0.01 DM
C528	87-010-197-080		CAP, CHIP 0.01 DM
C529	87-010-197-080		CAP, CHIP 0.01 DM
C530	87-010-197-080		CAP, CHIP 0.01 DM
C531	87-010-197-080		CAP, CHIP 0.01 DM
C532	87-010-374-040		CAP,E 47-10
C533	87-010-197-080		CAP, CHIP 0.01 DM
C534	87-010-555-040		CAP,E 100-10 GAS
C535	87-010-197-080		CAP, CHIP 0.01 DM
C536	87-010-078-040		CAP,E 47-6.3 5L
C537	87-010-197-080		CAP, CHIP 0.01 DM
C538	87-010-196-080		CHIP CAPACITOR,0.1-25
C539	87-016-669-080		C-CAP,S 0.1-25 K B
C540	87-010-078-040		CAP,E 47-6.3 5L
C541	87-010-197-080		CAP, CHIP 0.01 DM
C542	87-010-318-080		C-CAP,S 47P-50 CH
C544	87-010-197-080		CAP, CHIP 0.01 DM
C546	87-010-197-080		CAP, CHIP 0.01 DM
C549	87-010-494-040		CAP,E 1-50 GAS
C550	87-010-196-080		CHIP CAPACITOR,0.1-25
C551	87-012-153-080		C-CAP,S 120P-50 CH
C552	87-016-526-080		C-CAP,S 0.47-16 BK
C554	87-010-197-080		CAP, CHIP 0.01 DM
C556	87-010-378-040		CAP,E 10-16
C557	87-010-316-080		C-CAP,S 33P-50 CH
C558	87-010-315-080		C-CAP,S 27P-50 CH
C560	87-010-197-080		CAP, CHIP 0.01 DM
C601	87-010-197-080		CAP, CHIP 0.01 DM
C602	87-010-197-080		CAP, CHIP 0.01 DM
C603	87-010-112-040		CAP,E 100-16
C604	87-010-196-080		CHIP CAPACITOR,0.1-25
C605	87-010-197-080		CAP, CHIP 0.01 DM
C606	87-010-197-080		CAP, CHIP 0.01 DM
C607	87-010-313-080		CAP, CHIP 18P
C608	87-010-313-080		CAP, CHIP 18P
C609	87-010-178-080		CHIP CAP 1000P
C610	87-010-178-080		CHIP CAP 1000P
C611	87-010-178-080		CHIP CAP 1000P
C612	87-010-178-080		CHIP CAP 1000P
C613	87-010-403-040		CAP,E 3.3-50 SME
C614	87-010-403-040		CAP,E 3.3-50 SME
C615	87-010-318-080		C-CAP,S 47P-50 CH
C616	87-010-318-080		C-CAP,S 47P-50 CH
CN101	87-A60-424-010		CONN,16P V TOC-B
CN102	87-099-199-010		CONN,6P 6216 H
CN401	87-099-212-010		CONN,5P 6216 V
CN403	87-099-030-010		CONN,13P 6216H
J501	87-009-502-010		JACK,PIN 1P Y EARTH
L101	87-005-196-080		COIL,10UH
L301	87-A50-095-010		COIL,68UH RCR875D
L302	87-005-426-080		COIL,3.3UH K FLR50
L502	87-005-204-080		COIL,47UH
L503	87-005-189-080		COIL 2.7UH
L504	87-005-187-080		COIL,1.8UH
L505	87-005-204-080		COIL,47UH

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
L506	87-005-204-080		COIL,47UH
L507	87-005-204-080		COIL,47UH
L508	87-005-817-080		C-COIL, 33UH J FLC32
M401	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
R130	87-022-364-080		C-RES,S 82K-1/10W F
R131	87-022-364-080		C-RES,S 82K-1/10W F
R132	87-022-364-080		C-RES,S 82K-1/10W F
R133	87-022-364-080		C-RES,S 82K-1/10W F
R134	87-022-364-080		C-RES,S 82K-1/10W F
R135	87-022-364-080		C-RES,S 82K-1/10W F
R507	87-A00-408-080		C-RES,S 2K-1/10W D
S201	87-A90-162-010		SW,SL 1-1-3 SSSU
S401	87-036-109-010		PUSH SWITCH
S402	87-036-109-010		PUSH SWITCH
W1	84-ZG1-673-010		F-CABLE,5P 1.25 210MM BLACK N
W2	85-NFT-611-110		FF-CABLE 16P-1.0
W3	84-ZG1-630-010		CABLE FFC 6P-1.25
X201	87-A70-124-080		VIB,CER 8.0MHZ
X501	87-A70-125-080		VIB,XTAL 27MHZ 50PPM
X601	87-030-270-080		VIB,XTAL 16.9344MHZ

LED C.B

LED401	87-070-200-080		LED,SLP636C-81-S-T1
LED402	87-017-350-080		LED,SEL1550CM
LED403	87-017-350-080		LED,SEL1550CM
LED404	87-070-200-080		LED,SLP636C-81-S-T1

T-T C.B

C401	87-018-214-080		CAP TC U 0.1-50F
CON401	86-NFZ-675-010		CONN,5P H 6216-11H
PS401	87-026-573-010		IC,GP1S53V

DRIVE C.B

CN3	87-009-349-010		CONN,6P H WHT PH
M20	87-045-358-010		MOT,RF-310TA 43
M21	87-045-356-010		MOT,RF-310TA 30
SW1	87-A90-042-010		SW,LEAF MSW-17310MVPO

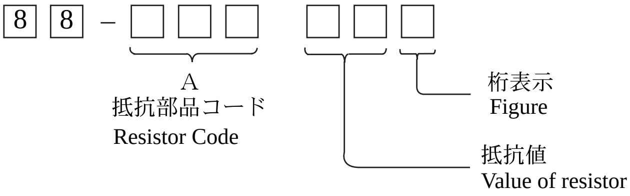
CD MOTOR C.B

CN4	87-099-210-010		CONN,5P H BLK 6216
M1	87-045-305-010		MOT,RF-500TB
SW1	87-035-110-010		SW,MICRO SPPB62
SW2	87-035-110-010		SW,MICRO SPPB62

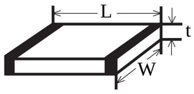
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○ チップ抵抗部品コード / CHIP RESISTOR PART CODE

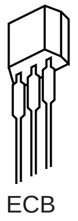
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 – □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

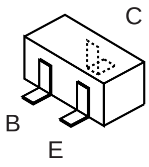
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Diamensions (mm)				抵抗コード :A Resistor Code : A
				外形 / Form	L	W	t	
1/16W	1608	5%	CJ		1.6	0.8	0.45	108
1/10W	2125	5%	CJ		2	1.25	0.45	118
1/8W	3216	5%	CJ		3.2	1.6	0.55	128

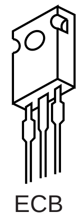
TRANSISTOR ILLUSTRATION



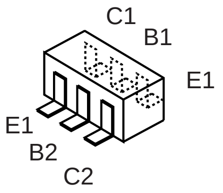
2SA933S



2SA1162
2SC2712
DTA123JK
DTA124XK
DTC124XK

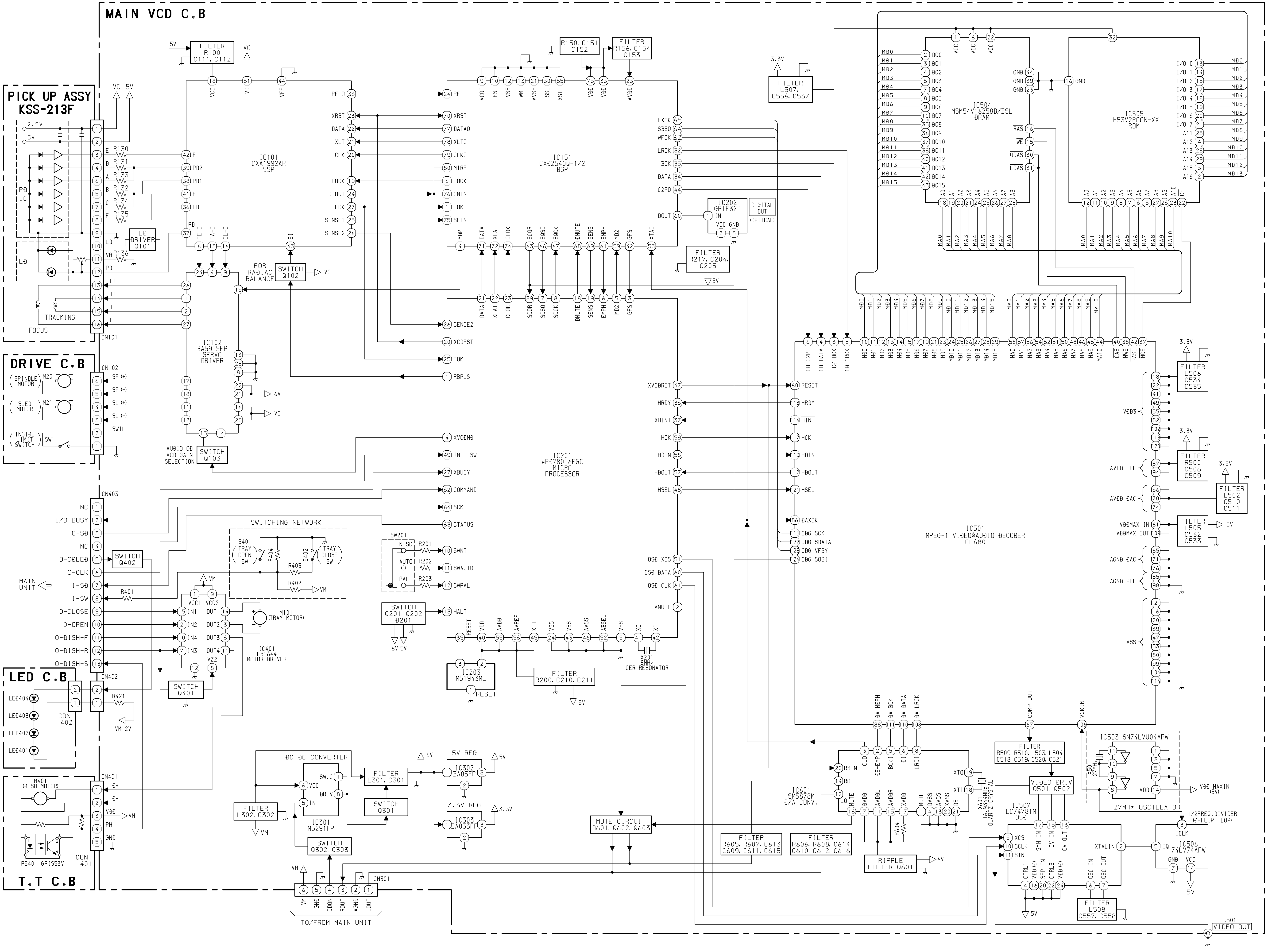


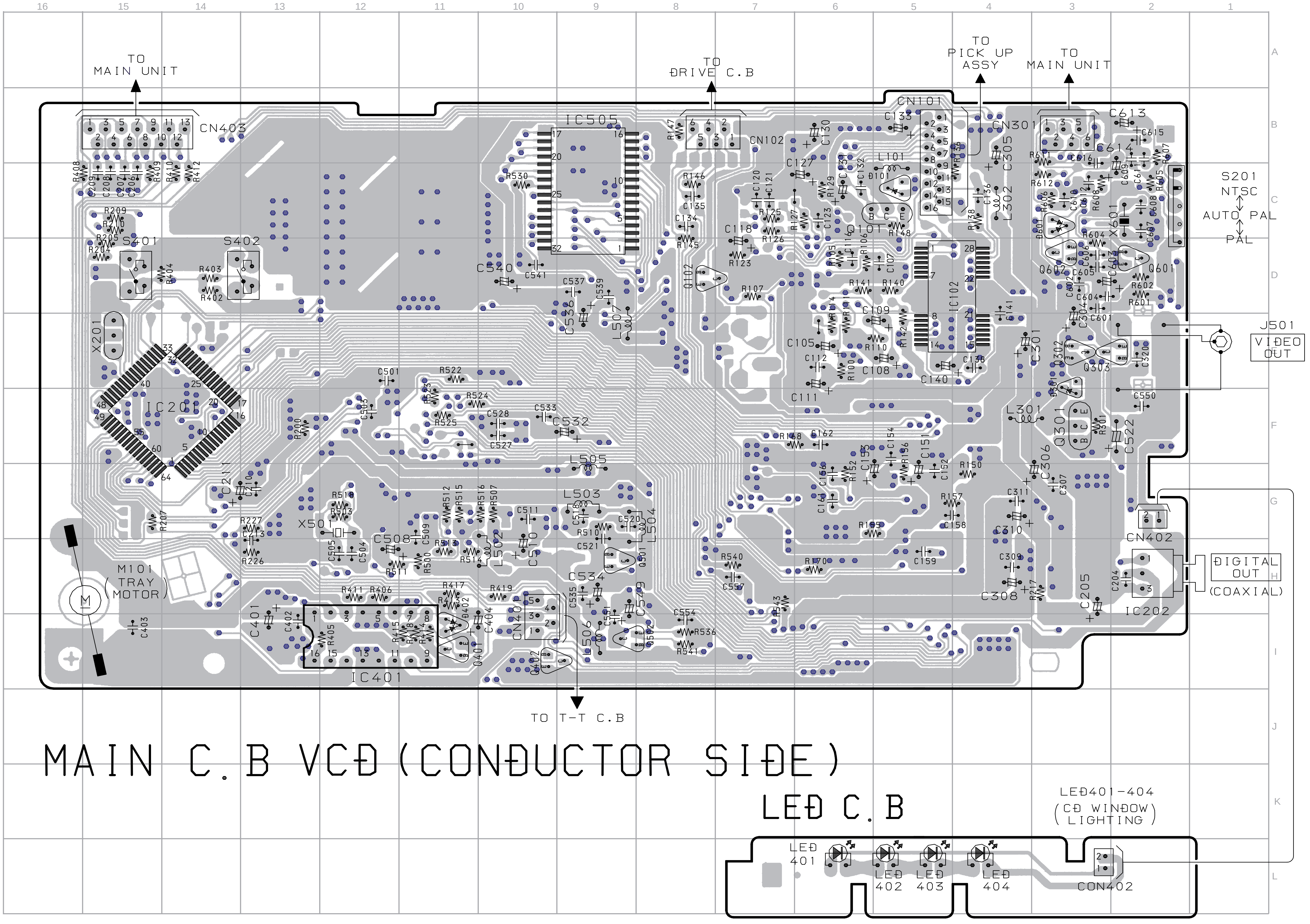
2SA1357


C1
B1
E1
E1
B2
C2

HN1C03F

BLOCK DIAGRAM


MAIN VCD C.B
PICK UP ASSY
KSS-213F
CN101
FOCUS
TRACKING
LD DRIVER Q101
DRIVE C.B
CN102
SPINDLE MOTOR M20
SLED MOTOR M21
INSIDE LIMIT SWITCH SW1
SP (+)
SP (-)
SL (+)
SL (-)
SWIL
LED C.B
LED404
LED403
LED402
LED401
CON 402
CN402
R421
VM 2V
T.T C.B
M401 (DISH MOTOR)
PS401 GP1S53V
CON 401
CN401
D+
D-
VDD
PH
GND
CN403
NC
I/O BUSY
O-SD
NC
O-CDLED
O-CLK
I-SD
I-SW
O-CLOSE
O-OPEN
O-DISH-F
O-DISH-R
O-DISH-S
MAIN UNIT
SWITCH Q402
R401
FILTER R100 C111, C112
IC101 CXA1992AR SSP
IC102 BA5915FP SERVO DRIVER
FOR RADIAC BALANCE
SWITCH Q102
AUDIO CD VCD GAIN SELECTION
SWITCH Q103
R150, C151 C152
FILTER R156, C154 C153
IC151 CXD2540Q-1/2 DSP
IC202 GP1F32T
DIGITAL OUT (OPTICAL)
FILTER R217, C204, C205
IC201 μPD78016FGC MICRO PROCESSOR
SWITCHING NETWORK
S401 TRAY OPEN SW
S402 TRAY CLOSE SW
R404
R403
R402
IC401 LB1644 MOTOR DRIVER
M101 (TRAY MOTOR)
SWITCH Q401
SW201
NTSC
AUTO
PAL
R201
R202
R203
SWITCH Q201, Q202 D201
IC203 M51943ML
RESET
FILTER R200, C210, C211
X201 8MHz CER. RESONATOR
DC-DC CONVERTER
IC301 M5291FP
FILTER L301, C301
SWITCH Q301
FILTER L302, C302
SWITCH Q302, Q303
5V REG
IC302 BA05FP
3.3V REG
IC303 BA033FP
MUTE CIRCUIT D601, Q602, Q603
CN301
VM GND CDON ROUT AGND LOUT
TO/FROM MAIN UNIT
FILTER L507, C536, C537
IC504 MSM54V16258B/BSL DRAM
IC505 LH53V2R00N-XX ROM
IC501 MPEG-1 VIDEO&AUDIO DECODER CL680
FILTER L506 C534 C535
VDD3
FILTER R500 C508 C509
AVDD PLL
AVDD DAC
FILTER L502 C510 C511
VDDMAX IN
VDDMAX OUT
FILTER L505 C532 C533
AGND DAC
AGND PLL
VSS
IC601 SM5878M D/A CONV.
FILTER R605, R607, C613 C609, C611, C615
FILTER R606, R608, C614 C610, C612, C616
RIPPLE FILTER Q601
X601 16.9344MHz QUARTZ CRYSTAL
FILTER R509, R510, L503, L504 C518, C519, C520, C521
VIDEO DRIV Q501, Q502
IC507 LC74781M OSD
FILTER L508 C557, C558
IC503 SN74LVU04APW
X501 27MHz
27MHz OSCILLATOR
1/2FREQ.DIVIDER (D-FLIP FLOP)
IC506 74LV74APW
VDD MAXIN (5V)
J501 VIDEO OUT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15
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A
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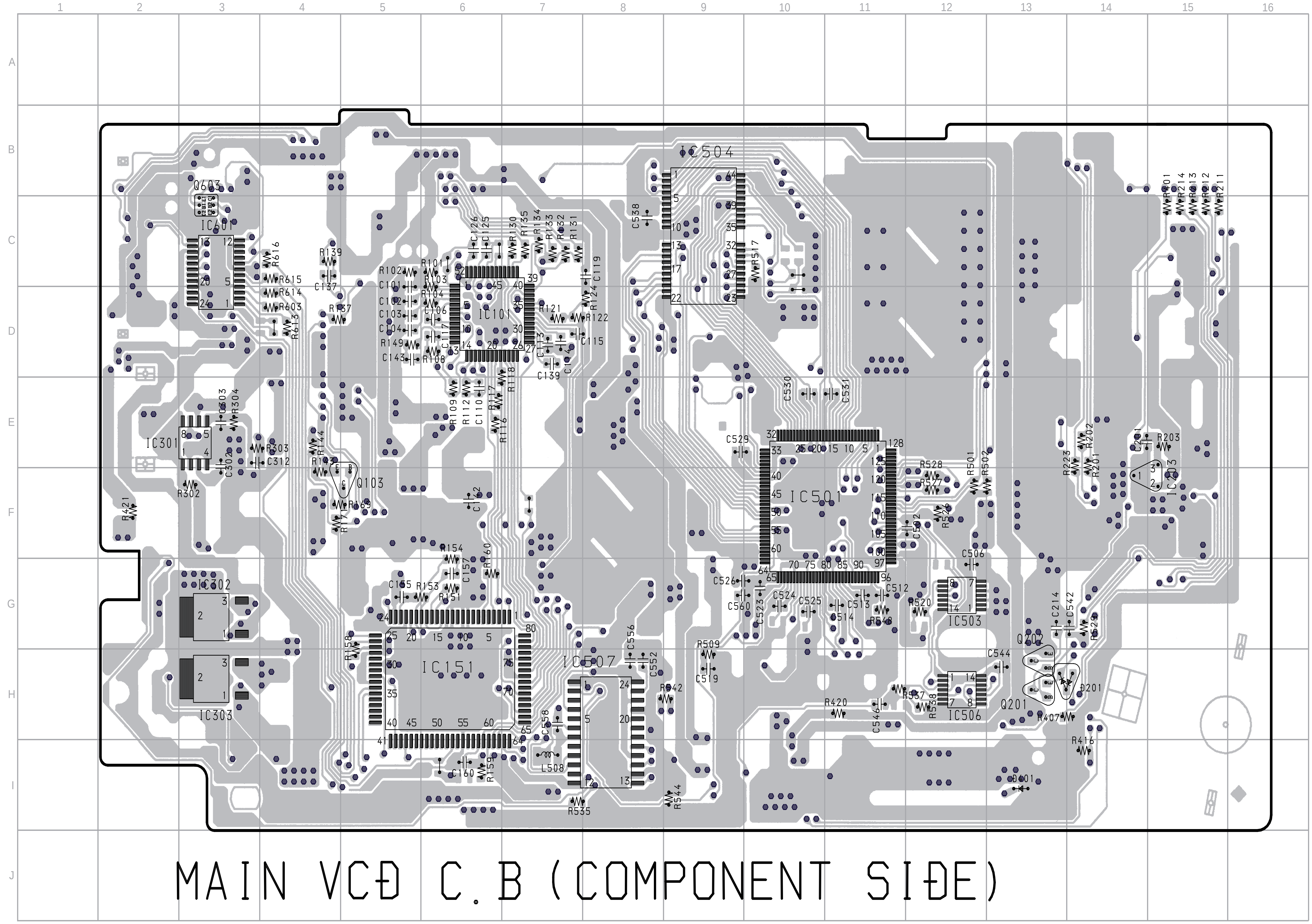
C
D
E
F
G
H
I
J
K
L
TO MAIN UNIT
TO DRIVE C.B
TO PICK UP ASSY
TO MAIN UNIT
CN403
IC505
CN102
CN101
CN301
C613
S201
NTSC
AUTO PAL
PAL
J501
VIDEO OUT
S401
S402
X201
IC201
IC102
Q101
Q102
Q301
Q302
Q303
Q601
Q602
L101
L301
L302
L503
L504
L505
L506
L507
X501
X601
M101
TRAY MOTOR
IC401
Q401
Q402
Q501
Q502
CN401
CN402
DIGITAL OUT
(COAXIAL)
IC202
TO T-T C.B
LED401-404
(CD WINDOW LIGHTING)
LED 401
LED 402
LED 403
LED 404
CON402

MAIN C.B VCD (CONDUCTOR SIDE)

LED C.B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G
H
I
J
IC504
IC601
Q603
IC101
IC301
IC302
IC303
Q103
IC151
IC507
IC501
IC503
IC506
Q202
Q201
Q203
D201
D601
L508
R616
R615
R614
R603
R613
R139
C137
R137
R101
R102
R103
R104
C101
C102
C103
C104
C106
C117
R149
R108
C143
C126
C125
R130
R135
R134
R133
R132
R131
C119
R124
R121
R122
C113
C115
C114
C139
R109
R112
C110
R117
R118
R116
C538
R517
C530
C531
C529
C603
R304
R303
C312
C302
R302
R421
R144
R143
R163
R171
C142
R154
R160
C157
C155
R153
R151
R158
C160
R159
C556
C552
R542
C558
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R544
R509
C519
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C560
C523
C524
C525
C513
C514
C512
R548
R520
R528
R527
R501
R502
R529
C532
C506
C544
R420
C546
R537
R538
C214
C542
R223
R202
R201
R203
C201
R407
R416
R201
R214
R213
R212
R211

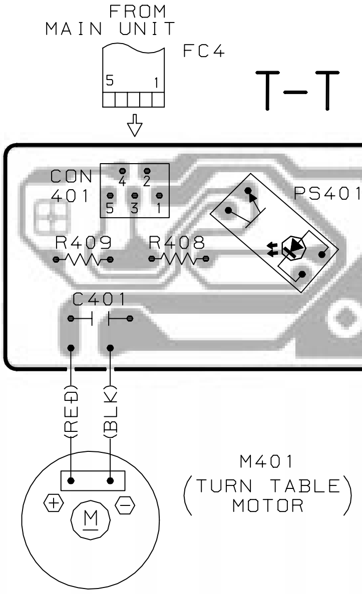
MAIN VCD C.B (COMPONENT SIDE)

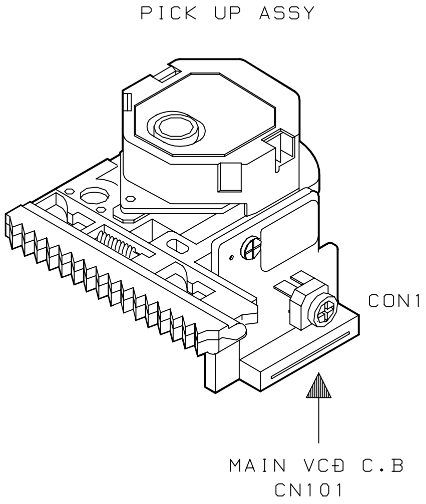
WIRING-3

1 2 3 4 5 6 7

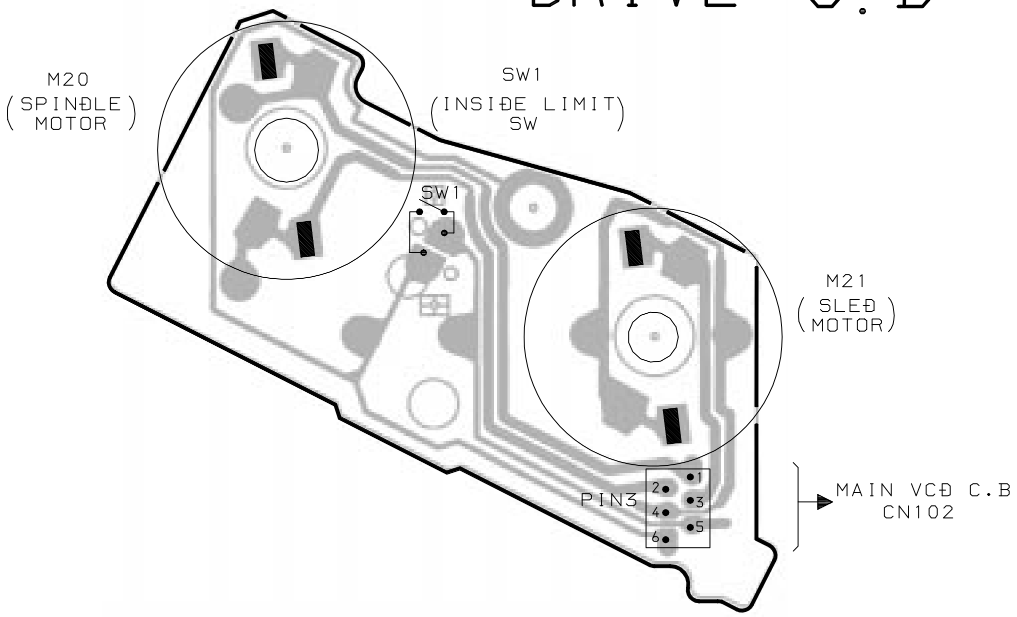
A B C D E F G H I J

T-T C.B

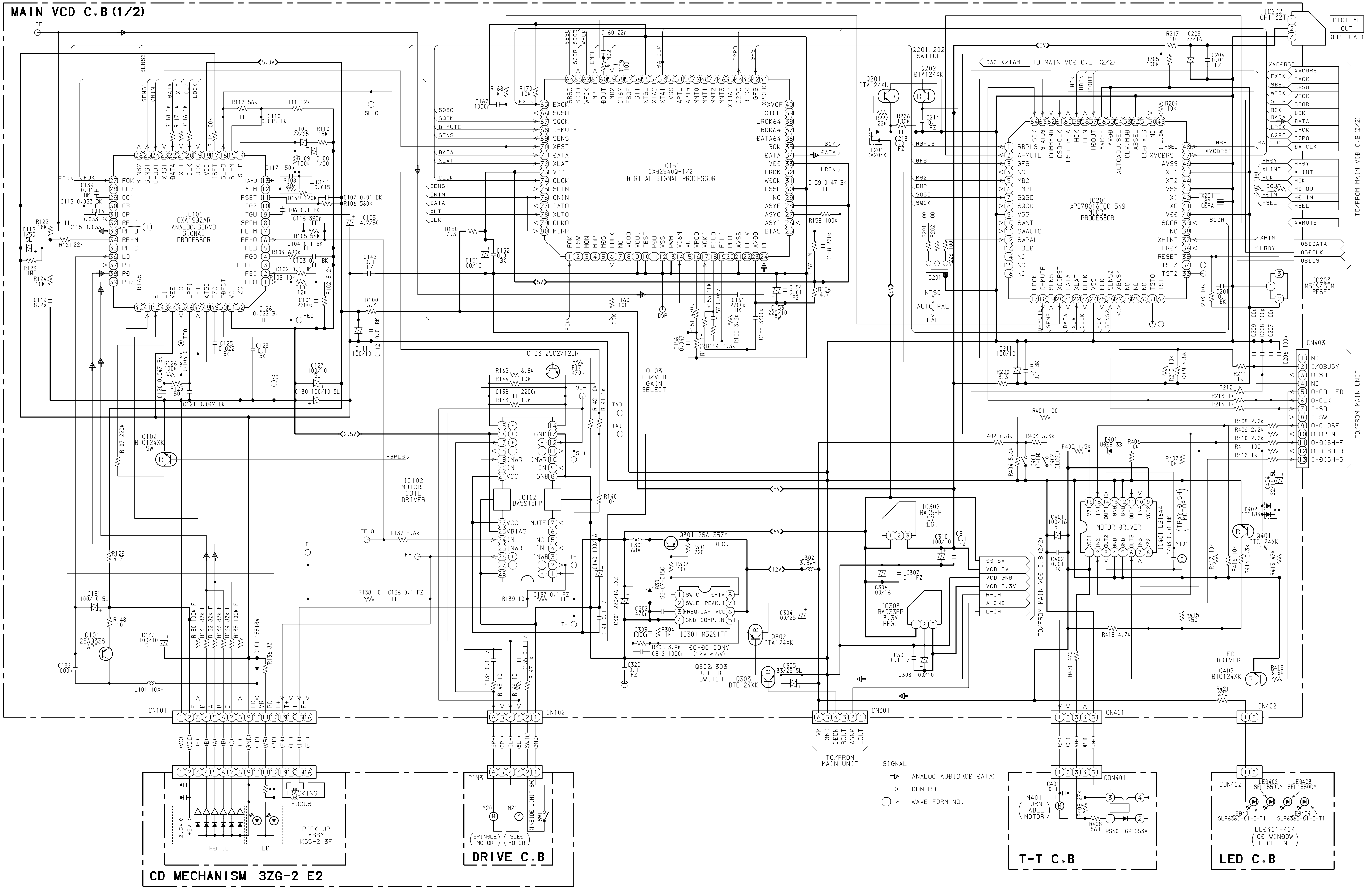

FROM
MAIN UNIT
FC4
5
1
CON
401
4 2
5 3 1
PS401
R409
R408
C401
(RED)
(BLK)
M401
(TURN TABLE
MOTOR)
M


PICK UP ASSY
CON1
MAIN VCD C.B
CN101

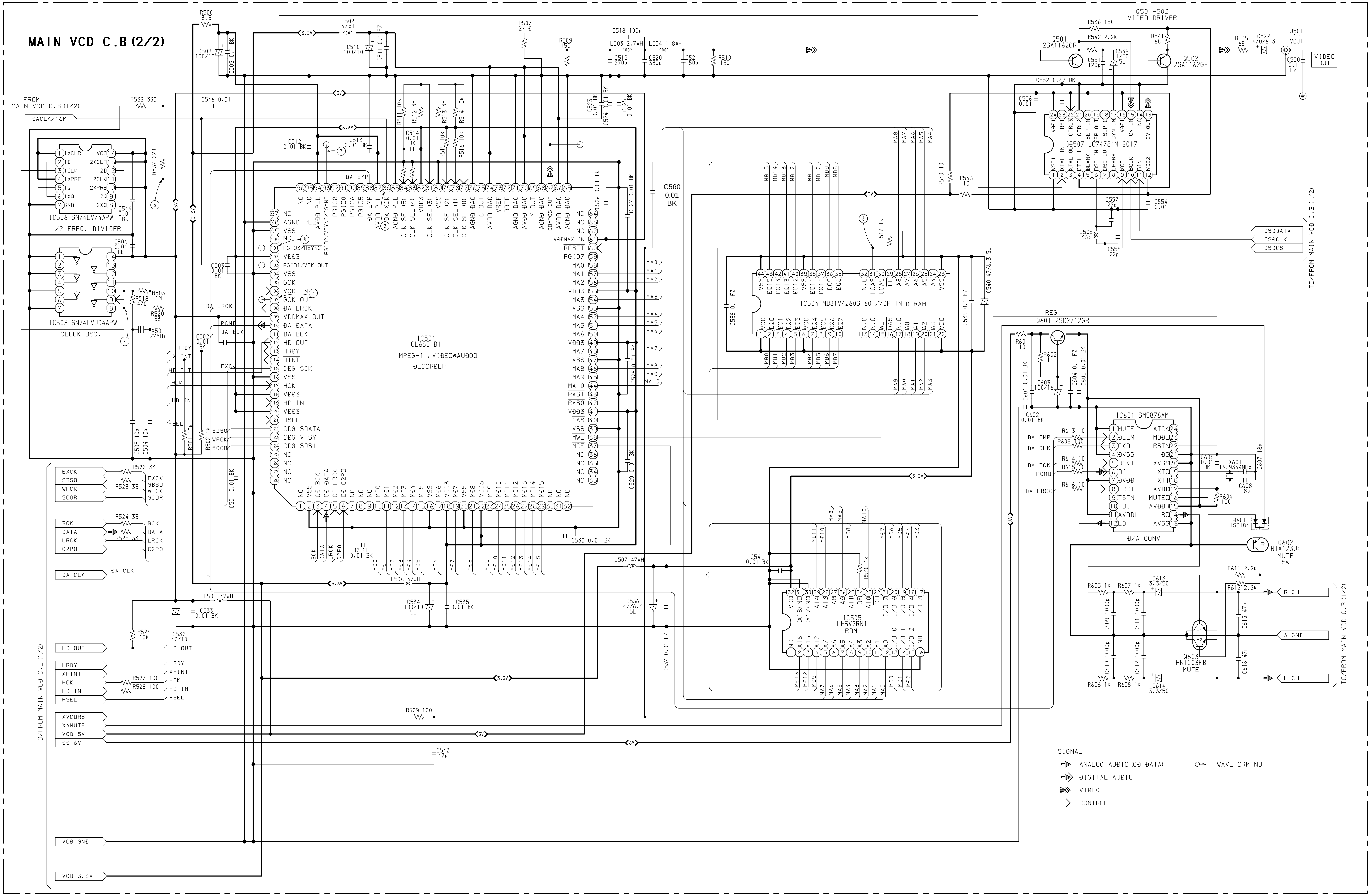
DRIVE C.B


M20
(SPINDLE
MOTOR)
SW1
(INSIDE LIMIT
SW)
SW1
M21
(SLED
MOTOR)
PIN3
1
2
3
4
5
6
MAIN VCD C.B
CN102

SCHEMATIC DIAGRAM-1

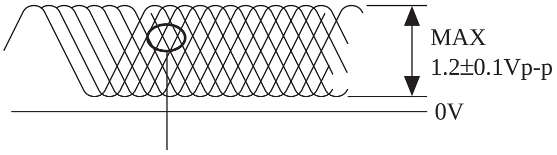

MAIN VCD C.B (1/2)
IC101 CXA1992AR ANALOG SERVO SIGNAL PROCESSOR
IC151 CXD2540Q-1/2 DIGITAL SIGNAL PROCESSOR
IC201 µPD78016FGC-549 MICRO PROCESSOR
IC202 GP1F32T
DIGITAL OUT (OPTICAL)
IC203 M51943BML RESET
IC102 BA5915FP
IC102 MOTOR COIL DRIVER
Q103 2SC2712GR
Q103 CD/VCD GAIN SELECT
Q102 DTC124XK SW
Q101 2SA933S APC
Q201, 202 SWITCH
Q201 DTA124XK
Q202 DTA124XK
Q301 2SA1357Y REG.
IC301 M5291FP
DC-DC CONV. (12V→6V)
Q302, 303 CD +B SWITCH
Q302 DTA124XK
Q303 DTC124XK
IC302 BA05FP 5V REG.
IC303 BA033FP 3.3V REG.
IC401 LB1644 MOTOR DRIVER
(TRAY DISH) MOTOR
Q401 DTC124XK SW
Q402 DTC124XK
LED DRIVER
TO MAIN VCD C.B (2/2)
TO/FROM MAIN VCD C.B (2/2)
TO/FROM MAIN UNIT
CN101
CN102
CN301
CN401
CN402
CN403
SIGNAL
ANALOG AUDIO (CD DATA)
CONTROL
WAVE FORM NO.
TRACKING
FOCUS
PICK UP ASSY KSS-213F
PD IC
LD
CD MECHANISM 3ZG-2 E2
M20 (SPINDLE MOTOR)
M21 (SLED MOTOR)
(INSIDE LIMIT SW)
DRIVE C.B
M401 TURN TABLE MOTOR
PS401 GP1S53V
CON401
T-T C.B
CON402
LED402 SEL1550CM
LED403 SEL1550CM
LED401 SLP636C-81-5-T1
LED404 SLP636C-81-5-T1
LED401-404 (CD WINDOW LIGHTING)
LED C.B

SCHEMATIC DIAGRAM-2


MAIN VCD C.B (2/2)
FROM MAIN VCD C.B (1/2)
DACLK/16M
IC506 SN74LV74APW
1/2 FREQ. DIVIDER
IC503 SN74LVU04APW
CLOCK OSC.
X501 27MHz
IC501 CL680-01
MPEG-1 . VIDEO&AUDIO DECORDER
IC504 MB81V4260S-60 /70PFTN D RAM
IC505 LH5V2RN1 ROM
IC507 LC74781M-9017
Q501-502 VIDEO DRIVER
Q501 2SA1162GR
Q502 2SA1162GR
J501 1P VOUT
VIDEO OUT
REG. Q601 2SC2712GR
IC601 SM5878AM
D/A CONV.
X601 16.9344MHz
D601 1SS184
Q602 DTA123JK MUTE SW
Q603 HN1C03FB MUTE
R-CH
A-GND
L-CH
OSDDATA
OSDCLK
OSDCS
TO/FROM MAIN VCD C.B (1/2)
EXCK
SBSO
WFCK
SCOR
BCK
DATA
LRCK
C2PO
DA CLK
HD OUT
HRDY
XHINT
HCK
HD IN
HSEL
XVCDRST
XAMUTE
VCD 5V
DD 6V
VCD GND
VCD 3.3V
C560 0.01 BK
SIGNAL
ANALOG AUDIO (CD DATA)
DIGITAL AUDIO
VIDEO
CONTROL
WAVEFORM NO.

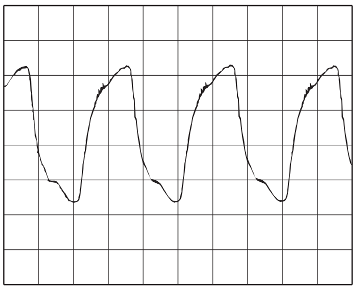
WAVE FORM

① IC101 Pin ㉝ (RF-O)
VOLT/DIV: 200mV
TIME/DIV: 0.5µS

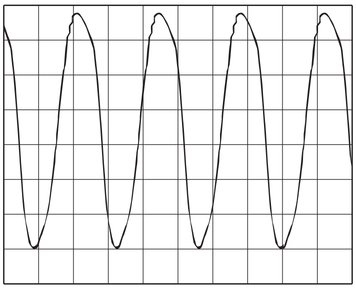


EYE PATTERN
must be CLEAR and MAX

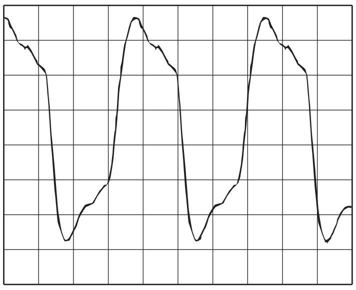
② IC501 Pin (86) DA XCK
16.93MHz
VOLT/DIV: 1V
TIME/DIV: 20nS



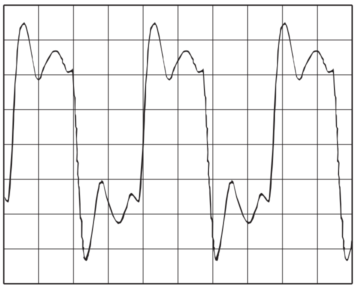
③ IC501 Pin (107) GCK OUT
42.3MHz
VOLT/DIV: 1V
TIME/DIV: 10nS



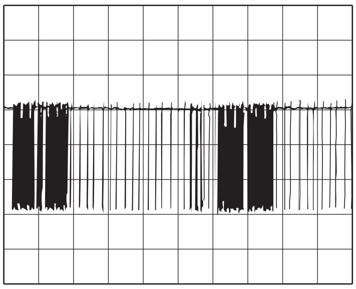
④ IC503 Pin ⑧ 33 VCK
27MHz±1.35kHz
VOLT/DIV: 1V
TIME/DIV: 10nS



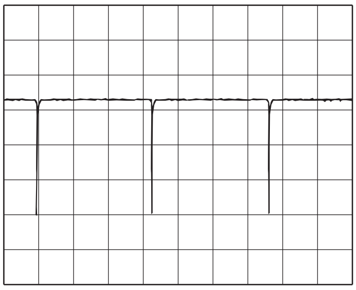
⑤ IC506 Pin ⑪ OSD CLK
13.5MHz±675Hz
VOLT/DIV: 1V
TIME/DIV: 20nS



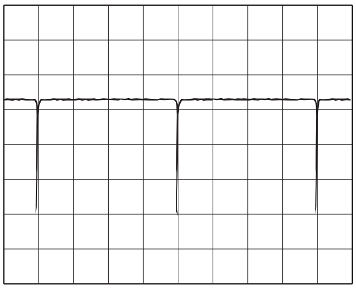
⑥ IC504 Pin ㉚ $\overline{\text{UCAS}}$
(Pin ㉛ $\overline{\text{LCAS}}$)
VOLT/DIV: 1V
TIME/DIV: 2µS



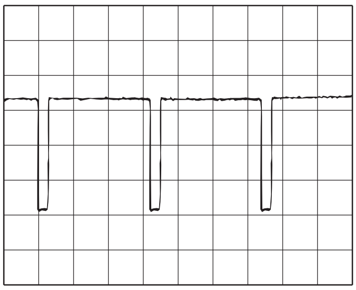
⑦ IC501 Pin (93) $\overline{\text{VSync}}$
NTSC
VOLT/DIV: 1V
TIME/DIV: 5mS



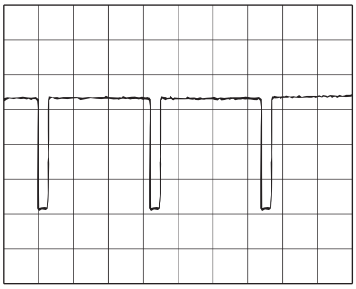
⑧ IC501 Pin (93) $\overline{\text{VSync}}$
PAL
VOLT/DIV: 1V
TIME/DIV: 5mS



⑧ IC501 Pin (101) $\overline{\text{HSync}}$
PAL
VOLT/DIV: 1V
TIME/DIV: 20µS



IC501 Pin (101) $\overline{\text{HSync}}$
NTSC
VOLT/DIV: 1V
TIME/DIV: 20µS



IC DESCRIPTION
IC, CXA1992AR

Pin No.	Pin Name	I/O	Description
1	FEO	O	Output terminal for focus error amplifier. Internally connected to window comparator input for bias condition.
2	FEI	I	Input terminal for focus error.
3	FDFCT	I	Capacitor connection terminal for time constant used when there is defect.
4	FGD	I	This pin is connected to GND via capacitor when high frequency gain of the focus servo is attenuated.
5	FLB	I	This is a pin where the time constant is externally connected to raise the low frequency gain of the focus servo.
6	FE_O	O	Focus drive output.
7	FEM	I	Focus amplifier inverted input pin.
8	SRCH	I	This is a pin where the time constant is externally connected to generate the focus search waveform.
9	TGU	I	This is a pin where the selection time constant is externally connected to set the tracking servo the high frequency gain.
10	TG2	I	This is a pin where the selection time constant is externally connected to set the tracking high frequency gain.
11	FSET	I	Pin for setting peak of the phase compensator of the focus tracking.
12	TA_M	I	Tracking amplifier inverted input pin.
13	TA_O	O	Tracking drive output.
14	SL_P	I	Sled amplifier non-inverted input pin.
15	SL_M	I	Sled amplifier inverted input pin.
16	SL_O	O	Sled drive output.
17	ISET	I	The current which determines height of the focus search, track jump and sled kick is input with external resistance connected.
18	Vcc	I	Power supply.
19	LOCK	I	“L” setting starts sled disorder-prevention circuit. (Not pull-up resistance)
20	CLK	I	Clock input for serial data transfer from CPU. (No pull-up resistance)
21	XLT	I	Latch input from CPU. (No pull-up resistance)
22	DATA	I	Serial data input from CPU. (No pull-up resistance)
23	XRST	I	Reset system at “L” setting. (No pull-up resistance)
24	C_OUT	O	Signal output for track number counting.
25	SENS1	O	FZC, DFCT1, TZC, BALH, TGH, FOH, or ATSC is output depending on the command from CPU.
26	SENS2	O	DFCT2, MIRR, BALL, TGL or FOL is output depending on the command from CPU.
27	FOK	O	Output terminal for focus OK comparator.
28	CC2	I	Input pin where the DEFECT bottom hold output is capacitance coupled.
29	CC1	O	DEFECT bottom-hold output terminal. Internally connected to interruption comparator input.
30	CB	I	Connection terminal for DEFECT bottom-hold capacitor.
31	CP	I	Connection terminal for MIRR hold-capacitor. Anti-reverse input terminal for MIRR comparator.

Pin No.	Pin Name	I/O	Description
32	RF_I	I	Input terminal by capacity combination of RF summing amplifier.
33	RF_O	O	Output terminal of RF summing amplifier. Checkpoint of Eye pattern.
34	RF_M	I	Anti-reverse input terminal for RF summing amplifier. The gain of RF amplifier is decided by the connection resistance between RF_M and RFO terminals.
35	RFTC	I	This is a pin where the selection time constant is externally connected to control the RF level.
36	LD	O	APC amplifier output terminal.
37	PD	I	APC amplifier input terminal.
38, 39	PD1, PD2	I	RFI-V amplifier inverted input pin. These pins are connected to the A+C and B+C pins of the optical pickup, receiving by currents input.
40	FEBIAS	I/O	Bias adjustment pin of the focus error amplifier.
41, 42	F, E	I	F and EIV amplifier inverted input pins. These pins are connected to the F and E of the optical pickup, receiving by current input.
43	EI	—	Gain adjustment pin of the I-V amplifier E. (When not in use of BAL automatic adjustment)
44	VEE	—	GND connection pin.
45	TEO	O	Output terminal for tacking-error amplifier. Output E-F signal.
46	LPFI	I	BAL adjustment comparator input pin. (Input through LPF from TEO)
47	TEI	I	Input terminal for tracking error.
48	ATSC	I	Window-comparator input terminal for detecting ATSC.
49	TZC	I	Input terminal for tracking-zero cross comparator.
50	TDFCT	I	Capacitor connection pin for the time constant used when there is defect.
51	VC	O	Output terminal for DC voltage reduced to half of VCC+VEE.
52	FZC	I	Input terminal for focus-zero cross comparator.

IC, CXD2540Q

Pin No.	Pin Name	I/O	Description
1	FOK	I	Focus OK input. Used for SENS output and the servo auto sequencer.
2	FSW	O	Spindle motor output filter switching output.
3	MON	O	Spindle motor on/off control output.
4	MDP	O	Spindle motor servo control.
5	MDS	O	
6	LOCK	O	High, when sampled value of GFS at 460Hz is high. Low, when sampled value of GFS at 460Hz is low by 8 times successively.
7	NC		
8	VCOO	O	Analog EFM PLL oscillation circuit output.
9	VCOI	I	Analog EFM PLL oscillation circuit input. fLOCK=8.6436MHz.
10	TEST	I	TEST pin.
11	PDO	O	Analog EFM PLL charge pump output.
12	VSS		GND.
13	PWMI	I	Spindle motor external control input.
14	V16M	O	VCO2 oscillation output for the wide-band EFM PLL.
15	VCTL	I	VCO2 control voltage input for the wide-band EFM PLL.
16	VPCO	O	Wide-band EFM PLL charge pump output.
17	VCKI	I	VCO2 oscillation input for the wide-band EFM PLL.
18	FILO	O	Multiplier PLL (slave=digital PLL) filter output.
19	FILI	I	Multiplier PLL filter input.
20	PCO	O	Multiplier PLL charge pump output.
21	AVSS		Analog GND.
22	CLTV	I	Multiplier VCO1 control voltage input.
23	AVDD		Analog power supply (5V).
24	RF	I	EFM signal input.
25	BIAS	I	Constant current input of the asymmetry circuit.
26	ASYI	I	Asymmetry comparator voltage input.
27	ASYO	O	EFM full-swing output.
28	ASYE	I	Low: asymmetry circuit off; high: asymmetry circuit on.
29	NC		
30	PSSL	I	Audio data output mode switching input. Low: serial output; high: parallel output.
31	WDCK	O	D/A interface for 48-bit slot. Word clock f=2Fs.
32	LRCK	O	D/A interface for 48-bit slot. LR clock f=Fs.
33	VDD		Power supply (5V).
34	DA16	O	DA16 (MSB) output when PSSL=1. 48-bit slot serial data (two's complement, MSB first) when PSSL=0.
35	DA15	O	DA15 output when PSSL=1. 48-bit slot bit clock when PSSL=0.
36	DA14	O	DA14 output when PSSL=1. 64-bit slot serial data (two's complement, LSB first) when PSSL=0.
37	DA13	O	DA13 output when PSSL=1. 64-bit slot bit clock when PSSL=0.
38	DA12	O	DA12 output when PSSL=1. 64-bit slot LR clock when PSSL=0.

Pin No.	Pin Name	I/O	Description
39	DA11	O	DA11 output when PSSL=1. GTOP output when PSSL=0.
40	DA10	O	DA10 output when PSSL=1. XUGF output when PSSL=0.
41	DA09	O	DA09 output when PSSL=1. XPLCK output when PSSL=0.
42	DA08	O	DA08 output when PSSL=1. GFS output when PSSL=0.
43	DA07	O	DA07 output when PSSL=1. RFCK output when PSSL=0.
44	DA06	O	DA06 output when PSSL=1. C2PO output when PSSL=0.
45	DA05	O	DA05 output when PSSL=1. XRAOF output when PSSL=0.
46	DA04	O	DA04 output when PSSL=1. MNT3 output when PSSL=0.
47	DA03	O	DA03 output when PSSL=1. MNT2 output when PSSL=0.
48	DA02	O	DA02 output when PSSL=1. MNT1 output when PSSL=0.
49	DA01	O	DA01 output when PSSL=1. MNT0 output when PSSL=0.
50	APTR	O	Aperture compensation control output. This pin outputs a high signal when the right channel is used.
51	APTL	O	Aperture compensation control output. This pin outputs a high signal when the left channel is used.
52	VSS		GND.
53	XTAI	I	Crystal oscillation circuit input.
54	XTAO	O	Crystal oscillation circuit output.
55	XTSL	I	Crystal selector input.
56	FSTT	O	2/3 frequency divider output for Pins 53 and 54.
57	FSOF	O	1/4 frequency divider output for Pins 53 and 54.
58	C16M	O	16.9344MHz output. (V16M output in CLV-W and CAV-W modes)
59	MD2	I	Digital-out on/off control. High: on; low: off
60	DOUT	O	Digital-out output.
61	EMPH	O	Outputs a high signal when the playback disc has emphasis, and a low signal when there is no emphasis.
62	WFCK	I	WFCK (write frame clock) output.
63	SCOR	O	Outputs a high signal when either subcode sync S0 or S1 is detected.
64	SBSO	O	Sub P to W serial output.
65	EXCK	I	SBSO readout clock input.
66	SQSO	O	Sub Q 80-bit and PCM peak, level metter and internal status outputs.
67	SQCK	I	SQSO readout clock input.
68	MUTE	I	High: mute; low: release
69	SENS	—	SENS output to CPU.
70	XRST	I	System reset. Reset when low.
71	DATA	O	Serial data input from CPU.
72	XLAT	O	Latch input from CPU. Serial data is latched at the falling edge.
73	VDD		Power supply (5V).
74	CLOK	O	Serial data transfer clock input from CPU.
75	SEIN	I	SENS input from SSP.
76	CNIN	I	Track jump count signal input.

Pin No.	Pin Name	I/O	Description
77	DATO	O	Serial data output to SSP.
78	XLTO	O	Serial data latch output to SSP. Latched at the falling edge.
79	CLKO	O	Serial data transfer clock output to SSP.
80	MIRR	I	Mirror signal input. Used when the number of tracks is 128 or more for the 2N-track jump and M track move of the auto sequencer.

Notes)

- The 64-bit slot is an LSB first, two's complement output, and the 48-bit slot is an MSB first, two's complement output.
- GTOP is used to monitor the frame sync protection status. (High: sync protection window open.)
- XUGF is the negative pulse for the frame sync obtained from the EFM signal. It is the signal before sync protection.
- XPLCK is the inverse of the EFM PLL clock. The PLL is designed so that the falling edge and the EFM signal transition point coincide.
- GFS goes high when the frame sync and the insertion protection timing match.
- RFCK is derived from the crystal accuracy, and has a cycle of 136μ.
- C2PO represents the data error status.
- XRAOF is generated when the 32K RAM exceeds the ±28F jitter margin.

IC, CL680

Pin No.	Pin Name	I/O	Description
1	NC	—	No connection.
2	VSS	—	GND.
3	CD BCK	I	Bit clock input from CD DSP.
4	CD DATA	I	Data input from CD DSP.
5	CD LRCK	I	LRCK input from CD DSP.
6	CD C2PO	I	C2 pointer input from CD DSP.
7-9	NC	—	No connection.
10-15	MD0-MD5	I/O	DRAM/ROM interface. (DATA)
16	VSS	—	Ground.
17	MD6	I/O	DRAM/ROM interface. (DATA)
18	VDD3	—	Power supply 3.3V.
19	MD7	I/O	DRAM/ROM interface. (DATA)
20	VSS	—	Ground.
21	MD8	I/O	DRAM/ROM interface. (DATA)
22	VDD3	—	Power supply 3.3V.
23-29	MD9-MD15	I/O	DRAM/ROM interface. (DATA)
30-36	NC	—	No connection.
37	$\overline{\text{MCE}}$	—	ROM chip enable.
38	$\overline{\text{MWE}}$	O	DRAM write enable.
39	VSS	—	Ground.
40	$\overline{\text{CAS}}$	O	DRAM/ROM interface.
41	VDD3	—	Power supply 3.3V.
42	$\overline{\text{RASO}}$	O	DRAM/ROM interface.
43	$\overline{\text{RASI}}$	O	
44-46	MA10-MA8	O	DRAM/ROM interface. (Address)
47	VSS	—	Ground.
48	MA7	O	DRAM/ROM interface. (Address)
49	VDD3	—	Power supply 3.3V.
50-52	MA6-MA4	O	DRAM/ROM interface. (Address)
53	VSS	—	Ground.
54	MA3	O	DRAM/ROM interface. (Address)
55	VDD3	—	Power supply 3.3V.
56-58	MA2-MA0	O	DRAM/ROM interface. (Address)
59	PGIO7	I/O	Programmable I/O.
60	$\overline{\text{RESET}}$	I	Reset input.
61	VDD MAX IN	—	Power supply - VDDMAX. (5.0V)
62-64	NC	—	No connection.
65	AGND DAC	—	Analog ground.
66	A DAC	—	Analog power supply (DAC) : 3.3V.
67	COMP OUT	O	Composite out.
68	AGND DAC	—	Analog ground.

Pin No.	Pin Name	I/O	Description
69	Y OUT	O	Video signal “Y” OUT.
70	AVDD DAC	—	Analog power supply (DAC) 3.3V.
71	AGND DAC	—	Analog ground.
72	R REF	I	Reference resistor input.
73	V REF	I	Voltage reference input.
74	AVDD DAC	—	Analog power supply (DAC) : 3.3V.
75	C OUT	O	Video signal “C” out.
76	AGND DAC	—	Analog ground.
77-79	CLK SEL0-2	I	Clock selection input.
80	VSS	—	Ground.
81	CLK SEL3	I	Clock selection input.
82	VDD3	—	Power supply 3.3V.
83, 84	CLK SEL4, 5	I	Clock selection input.
85	AGND PLL	—	Analog ground.
86	DA XCK	I	DA XCK (16.933MHz) input.
87	AVDD PLL	—	Analog power supply 3.3V.
88	DA EMP	O	DAC-emphasis output.
89, 90	PGIO5, O6	I/O	Programmable I/O.
91	PGIO0	I/O	
92	PGIO8	I/O	
93	$\overline{\text{VSYNC}}$/$\overline{\text{CSYNC}}$	O	$\overline{\text{VSYNC}}$/$\overline{\text{CSYNC}}$ output.
94	AVDD PLL	—	Analog power supply (PLL) 3.3V.
95	VID_DAC_CK	O	Video DAC clock.
96	PROC_CK	O	Processor clock.
97	AUD_XCK	O	Audio XCK.
98	AGND PLL	—	Analog ground.
99	VSS	—	Ground.
100	NC	—	No connection.
101	$\overline{\text{HSYNC}}$	O	$\overline{\text{HSYNC}}$ output.
102	VDD3	—	Power supply 3.3V.
103	VCK OUT	O	VCK out.
104	VSS	—	Ground.
105	GCK	I	Global clock signal input. (42.3MHz)
106	VCK	I	Video clock signal input. (27.0MHz)
107	GCK OUT	O	Global clock signal output. (27.0MHz)
108	DA LRCK	O	DAC-LRCK output.
109	VDD MAX OUT	—	Power supply (VDD MAX) : 5.0V.
110	DA DATA	O	DAC-PCM data output.
111	DA BCK	O	DAC-BIT clock output.
112	HD OUT	O	Micon interface. (Data out)
113	HRDY	O	Micon interface. (Host ready)

Pin No.	Pin Name	I/O	Description
114	$\overline{\text{HINT}}$	O	Micon interface. (Host interrupt)
115	CDG SCK	I	CD-G serial clock input.
116	VSS	—	Ground.
117	HCK	I	Micon interface. (Host clock)
118	VDD3	—	Power supply 3.3V.
119	HD IN	I	Micon interface. (Host data in)
120	VDD3	—	Power supply 3.3V.
121	HSEL	I	Micon interface. (Host select in)
122	CDG DATA	I	CD-G data input.
123	CDG VFSY	I	CD-G VFSY input.
124	CDG SOSI	I	CD-G SOSI input.
125	DSP-XCK	O	DSP-XCK output.
126-128	NC	—	No connection.

IC, LC74781M

Pin No.	Pin Name	I/O	Description
1	VSS1	—	GND connection terminal. (Digital ground terminal).
2	Xtal IN	I	External X’tal and capacitor for internal sync generator, or the external clock are connected to this terminal. (2fsc or 4fsc).
3	Xtal OUT	O	
4	CTRL1	I	Either the external clock input mode or the X’tal generator mode is selected by this selector terminal. L: X’tal generator mode, H: External clock input.
5	BLANK	O	Blank signal (character and the green ORed signal) is output from this terminal. (MODE 0: composite sync signal is output at H.) When reset ($\overline{\text{RST}}$ terminal = L), the X’tal clock signal is output. (It is not output when reset by the reset command).
6	OSC IN	I	External coil and capacitor for the character output dot clock generator are connected to this terminal.
7	OSC OUT	O	
8	CHARA	O	The character signal is output from this terminal. (MOD 0: when H, the external sync signal identification signal is output from this terminal. This output signal tells whether the external sync signal is present or not. When external sync signal is present, H is output.) When reset ($\overline{\text{RST}}$ terminal = L), the dot clock signal (LC oscillator) is output. (It is not output when reset by the reset command).
9	$\overline{\text{CS}}$	I	Enable signal for the serial data input is input to this terminal. The serial data input is enabled at L. Pull-up resistor is built-in. (Hysteresis input).
10	SCLK	I	Clock of the serial data input is input to this terminal. Pull-up resistor is built-in. (Hysteresis input).
11	SIN	I	Serial data input terminal. Pull-up resistor is built-in. (Hysteresis input).
12	VDD2	—	Power supply for the composite video signal level adjustment. (Analog power supply).
13	CV OUT	O	Composite video signal output terminal.
14	NC	—	Connected to GND or not connected.
15	CV IN	I	Composite video signal input terminal.
16	VDD1	—	Power supply (+5V digital power supply).
17	SYN IN	I	Video signal for the internal sync separator circuit is input to this terminal. (When the internal sync separator circuit is not used, the horizontal sync signal or composite sync signal is input to this terminal).
18	SEP C	—	Internal sync separator circuit bias voltage monitoring terminal.
19	SEP OUT	O	The composite sync output signal of the internal sync separator circuit is output from this terminal. (H: MOD 1. H: during internal sync mode. L: during external sync mode.) (When internal sync separator circuit is not used, the SYN IN input signal is output from this terminal).
20	SEP IN	I	The output signal of the SEP OUT terminal is integrated so that the vertical sync signal is input to this terminal. An integrator circuit must be connected between the SEP OUT terminal and this terminal. When this terminal is not used, it must be connected to VDD1.
21	CTRL2	I	When selecting any of the NTSC or PAL or PAL-M or PAL-N system, the pin setting has priority. When L, the NTSC system is selected after resetting. Selection of either NTSC or PAL or PAL-M or PAL-N system by the command becomes effective. H: PAL-M system.

Pin No.	Pin Name	I/O	Description
22	CTRL3	I	Controls whether or not to input the $\overline{\text{VSYNC}}$ signal to the SEPIN input. L: to input the $\overline{\text{VSYNC}}$ signal. H: not to input the $\overline{\text{VSYNC}}$ signal.
23	$\overline{\text{RST}}$	I	System reset input terminal. Pull-up resistor is built-in. (Hysteresis input).
24	VDD1	—	Power supply. (+5V digital power supply).

IC, µPD78016FGC

Pin No.	Pin Name	I/O	Description
1	RBPLS	O	RADIAL BALANCE PLUS.
2	AMUTE	O	AUDIO ANALOG MUTE (H=MUTE ON).
3	GFS	I	GFS.
4	XVCDMD	I	AUDIO/VIDEO CD MODE (L=VCD=SPINDLE GAIN UP).
5	MD2	O	DOUT MUTE CONT.
6	EMPH	I	EMPHASIS.
7	SQSO	I	SQDATA FROM CD.
8	SQCK	O	SQCLK TO CD.
9	VSS	—	GND.
10	SWNT	I	SW TV OUT MODE (L=NTSC).
11	SWAUTO	I	SW TV OUT MODE (L=NTSC/PAL AUTO).
12	SWPAL	I	SW TV OUT MODE (L=PAL).
13	EMERG	I	POWER EMERGENCY STOP (L*3sec=STOP).
14	NC	—	Nou used.
15	LPCSEL	I	“LPC ON/OFF (H=ON, NORMAL)”.
16	NC	—	Nou used.
17	LOCK	O	GFS (FRAME SYNC) LOCK (NO USE=H).
18	DMUTE	O	DIGITAL DATA OUT MUTE.
19	SENS	I	DSP SENS1 FROM CD.
20	XCDRST	O	CD RESET.
21	DATA	O	DATA TO CD.
22	XLAT	O	XLT TO CD.
23	CLOK	O	CLK TO CD.
24	VSS	—	GND.
25	FOK	I	FOCUS OK.
26	SENS2	I	SSP SENS2 FROM CD.
27	XBUSY	I/O	READY/BUSY I/O TO HOST OD.
28	NC	—	Nou used.
29	NC	—	
30	NC	—	
31	TST0	I/O	CHECK LAND.
32	TST1	I/O	
33	TST2	I/O	
34	TST3	I/O	
35	RESET	I	RESET.
36	HRDY	I	HRDY FROM CL680.
37	XHINT	I	HINT FROM CL680.
38	NC	—	Nou used.
39	SCOR	I	SCOR FROM CD.
40	VDD	—	5.0VDD.
41	XO	O	8.0MHz CERALOCK.

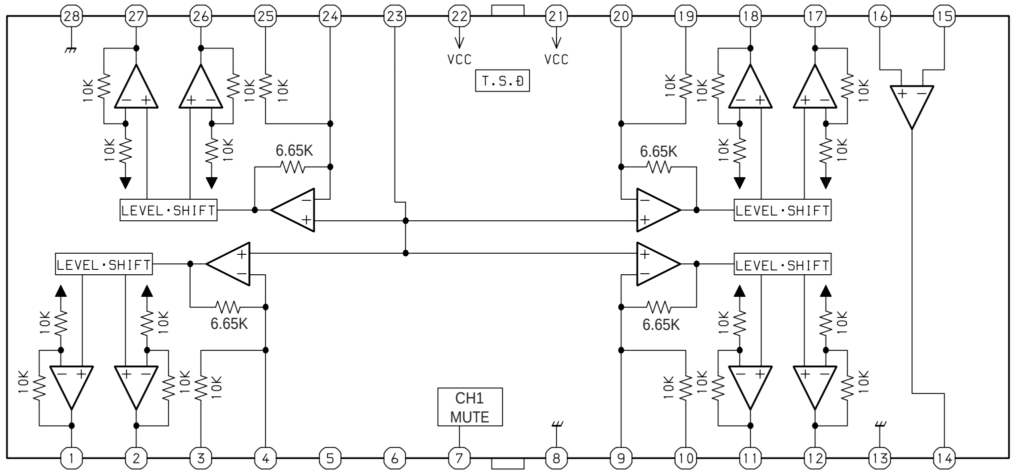
Pin No.	Pin Name	I/O	Description
42	XI	I	8.0MHz CERALOCK.
43	VSS	—	GND.
44	XT2	—	Nou used.
45	XT1	I	5.0VDD.
46	AVSS	—	GND.
47	XMPGRST	O	MPEG BLOCK IC RESET.
48	HSEL	O	ADDRESS/DATA SEL TO CL680.
49	INLSW	I	INSIDE LIMIT SW.
50	NC	—	Nou used.
51	OSDXCS	O	OSD CHIP SELECT.
52	ABSEL	I	CXA1992A/B SELECT (L=CXA1992A).
53	CLVSEL	I	CLV MODE SELECT (H=CLV-N).
54	AADSEL	I	AUTO ADJUST SELECT (H=AUTO ON).
55	AVDD	—	5.0VDD.
56	AVREF	—	
57	HDOUT	I	HD-OUT FROM CL680.
58	HDIN	O	HD-IN TO CL680.
59	HCK	O	HCK TO CL680.
60	OSDDATA	O	OSD DATA.
61	OSDCLK	O	OSD CLOCK.
62	COMMAND	I	COMMAND FROM HOST.
63	STATUS	O	STATUS TO HOST.
64	SCK	I	SCK FROM HOST.

IC, SM5878M

Pin No.	Pin Name	I/O	Description
1	MUTE	I	MODE = H: Soft mute ON/OFF terminal. (Mute at H). MODE = L: Attenuator level DOWN/UP terminal. (DOWN at H).
2	DEEM	I	De-emphasis ON/OFF terminal. (De-emphasis ON at H).
3	CKO	O	Oscillator clock output. (16.9344 MHz).
4	DVSS	—	Digital VSS terminal.
5	BCKI	I	Bit clock input terminal.
6	DI	I	Serial data input terminal.
7	DVDD	—	Digital VDD terminal.
8	LRCI	I	Sample rate clock (fs) input terminal. (H = L ch/L = R ch).
9	TSTN	I	Test input. (“H” or open during normal operation)
10	TO1	O	Test output 1. (Normally low level output).
11	AVDDL	—	Analog VDD terminal. (For L ch).
12	LO	O	Left channel analog output terminal.
13	AVSS	—	Analog VSS terminal.
14	RO	O	Right channel analog output terminal.
15	AVDDR	—	Analog VDD terminal. (For R ch).
16	MUTEO	O	Infinity zero detection output.
17	XVDD	—	X’tal system VDD terminal.
18	XTI	I	X’tal oscillator terminal. (Or external clock input terminal of 16.9344 MHz).
19	XTO	O	X’tal oscillator terminal.
20	XVSS	—	X’tal system VSS terminal.
21	DS	I	Double-speed/normal playback selection. (Double-speed at H).
22	RSTN	I	Reset terminal. (Reset at L).
23	MODE	I	Soft mute/Attenuator mode selection. (Soft mute at H).
24	ATCK	I	Attenuator level setup clock (Ignored when MODE = H).

IC BLOCK DIAGRAM

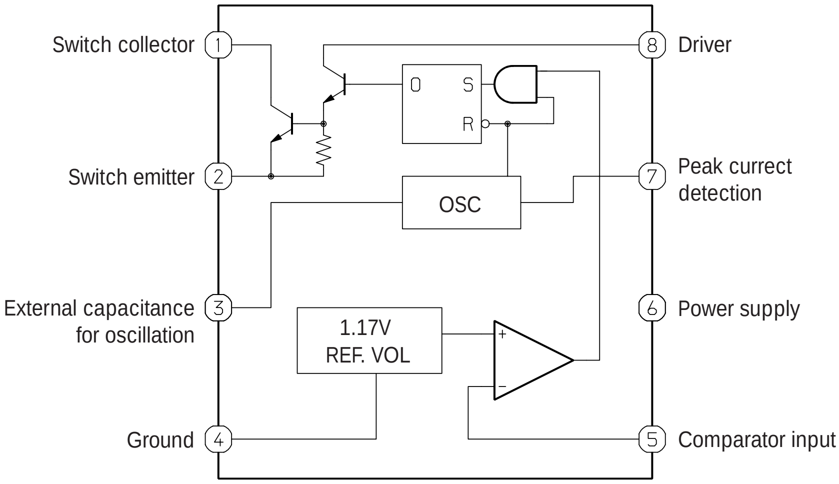
IC, BA5915FP



28
27
26
25
24
23
22
21
20
19
18
17
16
15
VCC
VCC
T.S.D
10K
6.65K
LEVEL·SHIFT
CH1
MUTE
1
2
3
4
5
6
7
8
9
10
11
12
13
14

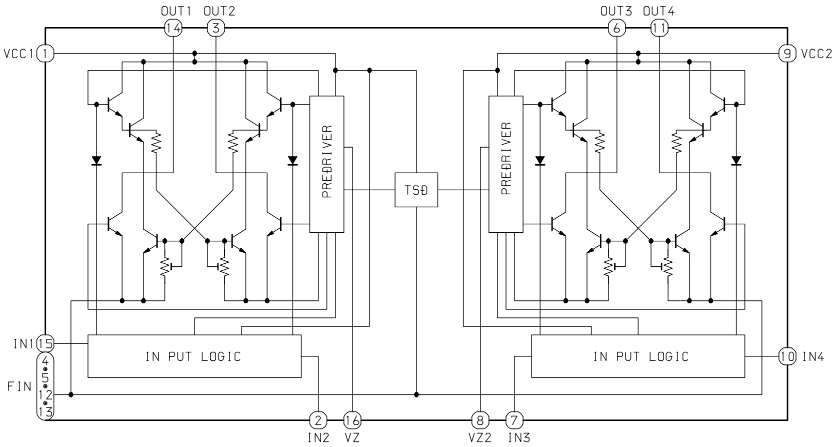
T.S.D: Thermal shut-down
Resistors are in units of Ω.

IC, M5291FP



Switch collector
1
Switch emitter
2
External capacitance
for oscillation
3
Ground
4
8
Driver
7
Peak currect
detection
6
Power supply
5
Comparator input
D
S
R
OSC
1.17V
REF. VOL
+
–

IC, LB1644



OUT1
OUT2
14
3
OUT3
OUT4
6
11
VCC1
1
9
VCC2
PREDRIVER
TSD
PREDRIVER
IN1
15
IN PUT LOGIC
IN PUT LOGIC
10
IN4
FIN
4
5
12
13
2
16
IN2
VZ
8
7
VZ2
IN3

TRUH TABLE

IN1	IN2	OUT1	OUT2	IN3	IN4	OUT3	OUT4
0	0	L	L	0	0	L	L
1	0	H	L	1	0	H	L
0	1	L	H	0	1	L	H
1	1	L	L	1	1	L	L

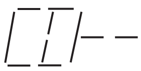
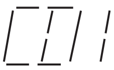
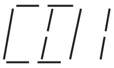
INPUT			OUTPUT				MODE	
IN1	IN2.3	IN4	OUT1	OUT2	OUT3	OUT4	M1	M2
0	0	0	L	L	L	L	BRAKE	BRAKE
1	0	0	H	L	L	L	FF/REW	BRAKE
0	1	1	L	H	L	L	REW/FF	BRAKE
1	1	0	L	L	H	L	BRAKE	FF/REW
0	0	1	L	L	L	H	BRAKE	REW/FF
1	1	1	L	L	L	L	BRAKE	BRAKE

TEST MODE

1. How to Activate CD Test Mode
   Insert the AC plug while pressing the function CD button.
   All FL display tubes will light up, and the test mode will be activated.

2. How to Cancel CD Test Mode
   Either one of the following operations will cancel the CD test mode.
   - Press the function button. (except CD function button)
   - Press the power switch button.
   - Disconnect the AC plug

3. CD Test Mode Functions
   When test mode is activated, the following mode functions from No.1 to No.5 can be used by pressing the operation keys.

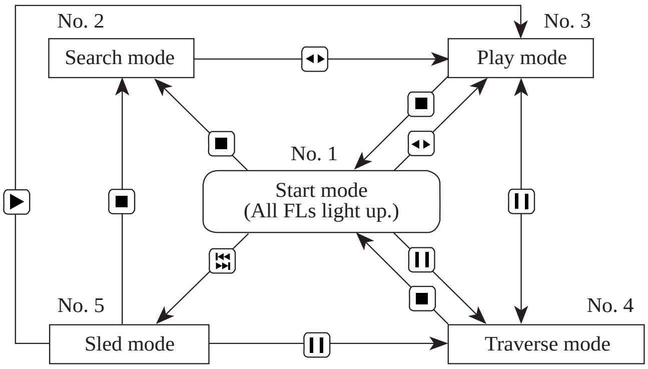
Mode/No.	Operation	FL display	Operation	Contents
Start mode No.1	Activation	TEST□□ □□ □□ Flashes repeatdly	• Test mode is activated. • CD block power is ON.	• Test mode
Search mode No.2	■ key		• Continual focus search (The pickup lens repeats the full-swing up-down motion.) * Avoid continual searches that last for more than 10 minutes. * NOTE 1	FOCUS SERVO • Check focus search waveform • Check focus error waveform (FOK/FZC are not monitored in the search mode)
Play mode No.3	◀▶key		• Normal playback • Focus search is continued if TOC cannot be read. * NOTE 1	FOCUS SERVO/TRACKING SERVO CLV SERVO/SLED SERVO Check FOK/FZC
Traverse mode No.4	❚❚ key		• During normal disc playback Press once; tracking servo OFF Press twice; tracking servo ON * NOTE 2	TRACKING SERVO ON/OFF Tracking balance (traverse) check
Sled mode No.5	⏮key ⏭	All lamps light	• Pickup moves to the outermost track • Pickup moves to the innermost track * NOTE 3 (During playback, machine operates normally.)	SLED SERVO Check SLED mechanism operation

* NOTE 1: There are cases when the tracking servo cannot be locked owing to the protection circuit being operated when heat builds up in the driver IC if the focus search is operated continually for more than 10 minutes. In these cases the power supply should be switched off for 10 minutes until heat has been reduced and then re-started.

* NOTE 2: Do not press the ⏮or ⏭keys when the machine is in the ❚❚ status is active. If they are pressed, playback will not be possible after the ❚❚ status has been canceled. If the ⏮or ⏭keys are pressed in the ❚❚status, press the ■key and return to the start mode (No.1).

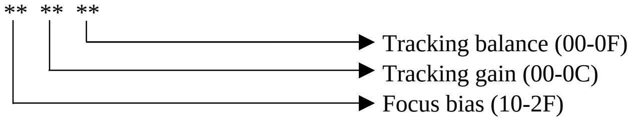
* NOTE 3: When pressing the ⏮or ⏭keys, take care to avoid damage to the gears. Because the sled motor is activated when the ⏮or ⏭ keys are pressed, even when the pick-up is at the outermost or innermost track.

4. Operation Outline
   The operation of each mode is carried out in the direction of the arrows from the start mode as indicated in the following illustration.



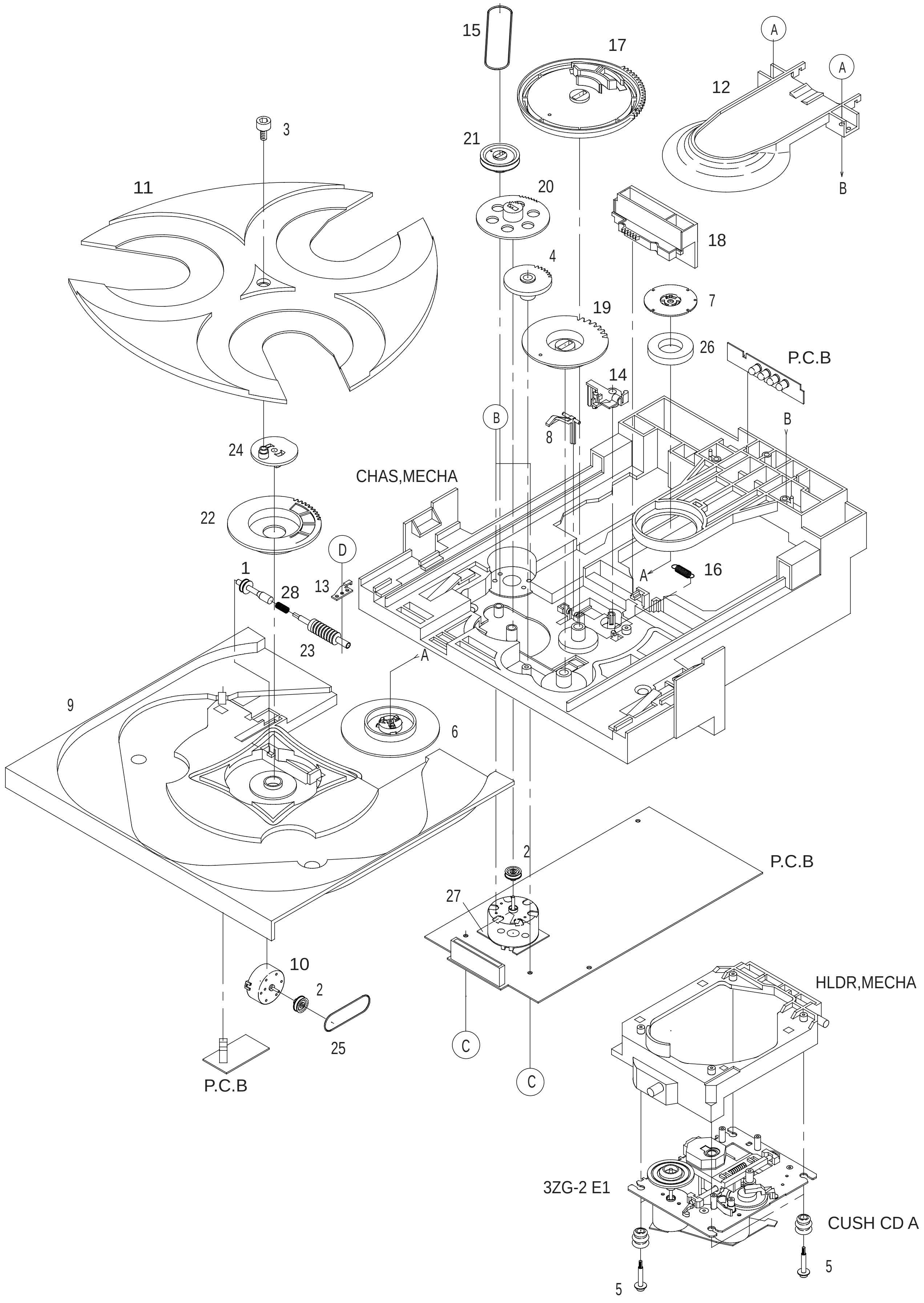
If the DISC DIRECT PLAY button is pressed, the machine performs the same operation as the PLAY button is pressed as shown. If the tray is opened by pressing OPEN/CLOSE button during Play mode or Traverse mode, the machine returns to the Start mode.

5. How to check the Automatic Adjustment Values
   The automatic adjustment values can be checked by pressing the square (■) button.
   FL display (displayed in hexadecimal values)



Note) The reference value is “20 08 08”.

MECHANICAL EXPLODED VIEW 1/1

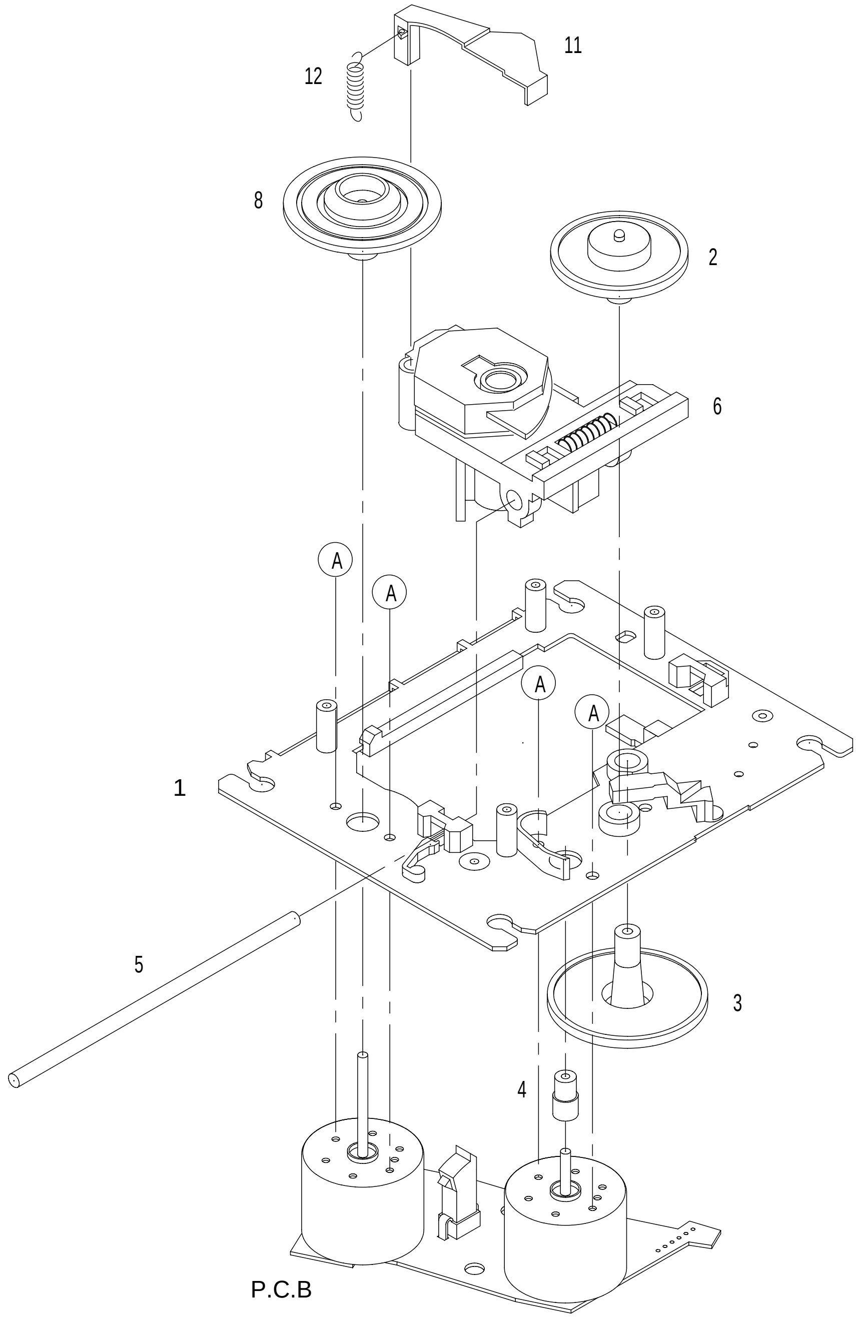

15
17
A
A
12
B
3
21
20
11
18
4
7
19
26
P.C.B
14
B
B
8
24
CHAS,MECHA
22
D
1
A
16
13
28
23
A
9
6
2
P.C.B
27
10
HLDR,MECHA
2
25
C
P.C.B
C
3ZG-2 E1
CUSH CD A
5
5

MECHANICAL PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZG1-239-210		PULLY,WORM N
2	84-ZG1-267-010		PULLEY,LOAD MO 8
3	81-ZG1-239-010		S-SCREW,TT
4	81-ZG1-291-110		GEAR,TRAY RELAY NO3
5	81-ZG1-271-010		S-SCREW MECH REAR
6	81-ZG1-277-310		HLDR,MAGNET N
7	81-ZG1-255-110		PLATE,MAGNET MK2
8	83-ZG3-213-010		LVR,SW
9	84-ZG1-003-310		TRAY,NO2-B
10	87-045-364-010		MOTOR(BCH3B14)
11	84-ZG1-005-210		TURNTABLE,NO1(*)
12	84-ZG1-011-010		REFLECTOR,CD
13	84-ZG1-259-010		SPR-P,WORM
14	84-ZG1-208-210		LEVER,CAM
15	84-ZG1-209-010		BELT,SQ1.8-117.7
16	84-ZG1-211-010		SPR-E CAM S
17	84-ZG1-215-410		GEAR,MAIN CAM BLU
18	84-ZG1-216-310		SLIDE,MECHA CAM YEL
19	84-ZG1-205-110		GEAR,TRAY
20	84-ZG1-206-110		GEAR,RELAY
21	84-ZG1-207-010		PULLEY,RELAY
22	84-ZG1-221-010		GEAR,MAIN TT
23	84-ZG1-238-010		GEAR,WORM N
24	84-ZG1-224-010		LEVER,TT
25	84-ZG1-225-010		BELT,SQ1.0-63.3
26	83-ZG3-602-010		RING,MAG
27	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
28	84-ZG1-248-010		SPR-C,WORM
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-251-070-410		U+2.6-3
C	87-342-036-210		UT2+2-8
D	87-067-981-010		BVT2+3-6 BLK

CD MECHANISM EXPLODED VIEW 1/1 (3ZG-2 E1)



CD MECHANISM PARTS LIST 1/1 (3ZG-2 E1)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-243-110		CHAS ASSY,SHT
2	83-ZG2-235-010		GEAR,A3
3	83-ZG2-205-210		GEAR,B
4	83-ZG2-236-010		GEAR MOTOR 3
5	83-ZG2-240-010		SHAFT,SLIDE 3
6	87-A90-836-010		PICKUP,KSS-213F
8	83-ZG2-233-010		TURN TABLE,A5
11	83-ZG2-245-110		LEVER,SHUTTER
12	83-ZG2-250-010		SPR-E,SHT 2
A	87-261-032-210		SCREW V+2-3

USE MODEL LIST

CX-NAK572
CX-NK270
CX-NK290
CX-NK370
CX-NK570
CX-NK765
CX-NK770
CX-NK970
DX-SNKH100

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
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Printed in Singpore